

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

# SERVICE MANUAL

# DX-1A CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KV-40XBR700</b>	RM-Y184	US	SCC-S47G-A
<b>KV-40XBR700</b>	RM-Y184	CND	SCC-S48E-A
<b>KV-40XBR700H</b>	RM-Y184	HAWAII	SCC-S54D-A

**ORIGINAL MANUAL ISSUE DATE: 8/2001**

ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL ARE APPENDED TO THE END OF THE PDF FILE.

<u>REVISION DATE</u>	<u>REVISION TYPE</u>	<u>SUBJECT</u>
8/2001	No revisions or updates are applicable at this time.	
10/2001	Supplement -1	Hawaii model added. New parts added to exploded view drawings.
11/2001	Supplement -2	Reference Cable Routing Added

TRINITRON® COLOR TELEVISION  
**SONY®**

# SERVICE MANUAL

# DX-1A CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KV-40XBR700</b>	RM-Y184	US	SCC-S47G-A
<b>KV-40XBR700</b>	RM-Y184	CND	SCC-S48E-A



KV-40XBR700




RM-Y184

TRINITRON® COLOR TELEVISION

**SONY®**

# TABLE OF CONTENTS

SECTION TITLE	PAGE	SECTION TITLE	PAGE
Specifications .....	4	<b>3. Safety Related Adjustments</b>	
Warnings and Cautions .....	5	3-1.  RV8001, RV8002 Confirmation Method and HV Service Adjustments .....	18
Safety Check-Out .....	6	3-2. B+ Max Confirmation .....	18
Self-Diagnostic Function.....	7	3-3. HV Service Flowchart .....	18
<b>1. Disassembly</b>		<b>4. Circuit Adjustments</b>	
1-1. Rear Cover Removal.....	9	4-1. Setting the Service Adjustment Mode.....	19
1-2. Chassis Assembly Removal.....	9	4-1.1. Resetting the Data .....	19
1-3. Service Position .....	9	4-2. Memory Write Confirmation Method .....	19
1-4. Picture Tube Removal .....	10	4-3. Remote Adjustment Buttons and Indicators.....	19
Anode Cap Removal Procedure .....	10	4-4. Service Data Lists .....	20
<b>2. Set-Up Adjustments</b>		<b>5. Diagrams</b>	
2-1. Beam Landing .....	11	5-1. Circuit Boards Location .....	48
2-2. V-PIN and V-CEN Adjustment .....	12	5-2. Printed Wiring Board and Schematic Diagram Information..	48
2-3. Convergence .....	12	5-3. Block Diagram and Schematics	
2-3.1. Vertical and Horizontal Static Convergence .....	12	Block Diagram .....	49
2-3.2. Operation of BMC (Hexapole) Magnet.....	12	A Board .....	54
2-3.3. TLH Plate Adjustment .....	12	B Board .....	61
2-3.4. Screen Corner Convergence .....	13	BC Board.....	75
2-3.5. Dynamic Convergence Adjustments .....	13	C Board .....	78
2-4. Focus Adjustment.....	13	D Board .....	81
2-5. Screen (G2).....	13	DH Board .....	88
2-6. Picture Quality Adjustments .....	14	HA Board.....	90
2-6.1. Video Input - Two Picture Sub Contrast Adjustment .....	14	HB Board.....	92
2-6.2. Video Input - Sub Hue/Sub Color Adjustment.....	14	S Board .....	93
2-6.3. RF Input - Two Picture Sub Contrast Adjustment.....	15	U Board .....	94
2-6.4. RF Input - Sub Hue/Sub Color Adjustment .....	15	W Board .....	96
2-7. White Balance (CRT) and Sub Bright Adjustment .....	16	5-4. Semiconductors .....	98
2-8. Raster Center Adjustment.....	16	<b>6. Exploded Views</b>	
2-9. Picture Distortion Adjustments .....	16	6-1. Chassis .....	100
2-9.1. NTSC (DRC) Full Mode Adjustment .....	16	6-2. Picture Tube .....	101
2-9.2. 1080i HD Mode Adjustment .....	17	<b>7. Electrical Parts List</b> .....	102
2-9.3. Vertical Compressed Mode Check and Confirmation.....	17		

## SPECIFICATIONS

<b>Power requirements</b>	<b>KV-40XBR700</b> 120V, 60 Hz
<b>Number of inputs/outputs</b>	
Video <sup>1)</sup>	4
S Video <sup>2)</sup>	3
Audio <sup>3)</sup>	6
Audio Out <sup>4)</sup>	1
Y, P <sub>B</sub> , P <sub>R</sub> <sup>5)</sup>	2
Monitor Out	1
Control-S (in/out)	YES
<b>Speaker output(W)</b>	7.5W x 2 15W Subwoofer
<b>Power Consumption(W)</b>	
In use(Max)	245W
In standby	2W
<b>Dimensions(W/H/D)</b>	
(mm)	1093 x 836 x 665 mm
(in)	43 <sup>1</sup> / <sub>8</sub> x 33 x 26 <sup>1</sup> / <sub>8</sub> in
<b>Mass</b>	
(kg)	138 kg
(lbs)	304 lbs.

- 1) 1 Vp-p 75 ohms unbalanced, sync negative  
2) Y: 1 Vp-p 75 ohms unbalanced, sync negative  
C: 0.286 Vp-p (Burst signal), 75 ohms  
3) More than 408 mVrms at the maximum volume setting (variable)  
More than 408 mVrms (fix)  
4) 500 mVrms (100% modulation), Impedance: 47 kilohms  
5) Y: 1.0 Vp-p, 75 ohms, sync negative;  
PB: 0.7 Vp-p, 75 ohms  
PR: Vp-p, 75 ohms

### Television system

American TV standard, NTSC

### Channel coverage

VHF: 2-13/ UHF: 14-69/ CATV: 1-125

### Picture tube

FD Trinitron<sup>®</sup> tube

### Visible screen size

38-inch picture measured diagonally

### Actual screen size

40-inch measured diagonally

### Antenna

75 ohm external terminal for VHF/UHF

### Supplied Accessories

Remote Commander RM-Y184  
Two Size AA (R6) Batteries

### Optional Accessories

Connecting cables: VMC-10/30HG, VMC-810S/820/830HGS, VMC-810S/820S,  
RKG69HG, RKC-515HG  
TV Stand: SV-40XBR7

**XBR**  
**TruSurround<sup>™</sup>**  
by SRS (●)<sup>®</sup>

TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and in select foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents. Purchase of this product does not convey the right to sell recordings made with the TruSurround technology.

### ● SRS (SOUND RETRIEVAL SYSTEM)

The ● SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc. BBE and BBE symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.



## WARNINGS AND CAUTIONS

### CAUTION


Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

### WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the AC power line.



### SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and  mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.


### ATTENTION!!

Après avoir déconnecté le cap de l'anode, court-circuiter l'anode du tube cathodique et celui de l'anode du cap au châssis métallique de l'appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.



### ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque  sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

### How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

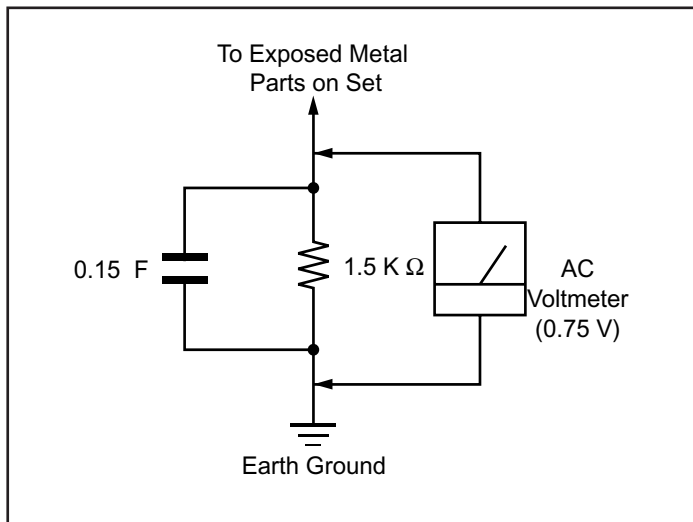


Figure A. Using an AC voltmeter to check AC leakage.

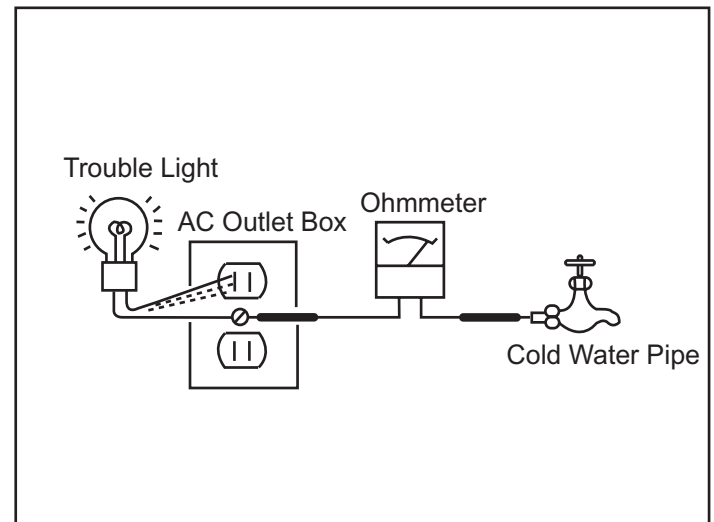


Figure B. Checking for earth ground.

## SELF-DIAGNOSTIC FUNCTION



The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/STEREO LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/STEREO LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

### Diagnostic Test Indicators

When an error occurs, the STANDBY/STEREO LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

Results for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

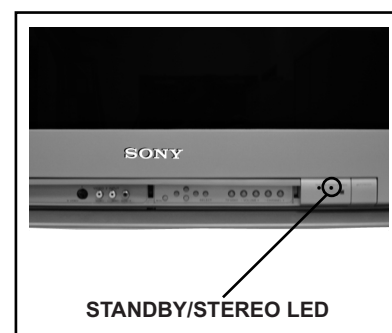
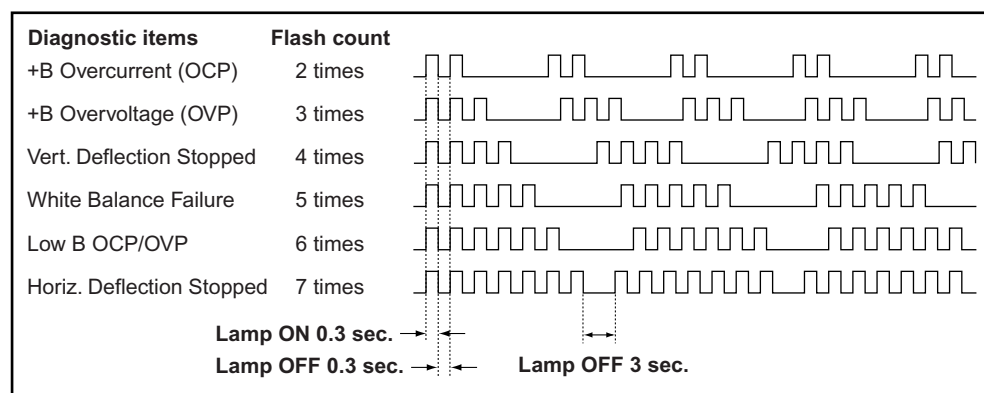
Diagnostic Item	No. of times STANDBY/STEREO lamp flashes	Display Result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light		<ul style="list-style-type: none"> <li>Power cord is not plugged in.</li> <li>Fuse is burned out F6001 (A Board).</li> </ul>	<ul style="list-style-type: none"> <li>Power does not come on.</li> <li>No power is supplied to the TV.</li> <li>AC power supply is faulty.</li> </ul>
+B Overcurrent (OCP) (See Note 1)	2 times	2:0 or 2:1	<ul style="list-style-type: none"> <li>H.OUT (Q5030) is shorted (D Board).</li> <li>+B PWM (Q5003) is shorted (D Board).</li> <li>IC9001, IC9002, IC9003 is shorted (C Board).</li> </ul>	<ul style="list-style-type: none"> <li>Power does not come on.</li> <li>Load on power line is shorted.</li> </ul>
+B Overvoltage (OVP)	3 times	3:0 or 3:1	<ul style="list-style-type: none"> <li>IC6505 is faulty (D Board).</li> </ul>	<ul style="list-style-type: none"> <li>Has entered standby mode.</li> </ul>
Vertical Deflection Stopped	4 times	4:0 or 4:1	<ul style="list-style-type: none"> <li><math>\pm 15V</math> is not supplied (D Board).</li> <li>IC5004 is faulty (D Board).</li> </ul>	<ul style="list-style-type: none"> <li>Has entered standby state after horizontal raster.</li> <li>Vertical deflection pulse is stopped.</li> <li>Power line is shorted or power supply is stopped.</li> </ul>
White Balance Failure (not balanced)	5 times	5:0 or 5:1	<ul style="list-style-type: none"> <li>Video OUT (IC9001-IC9003) is faulty (C Board).</li> <li>CRT drive (IC201) is faulty (A Board).</li> <li>G2 is improperly adjusted (See Note 2).</li> </ul>	<ul style="list-style-type: none"> <li>No raster is generated.</li> <li>CRT Cathode current detection reference pulse output is small.</li> </ul>
LOW B OCP/OVP (overcurrent/overvoltage) (See Note 3)	6 times	6:0 or 6:1	<ul style="list-style-type: none"> <li>+5 line is overloaded (A, B Boards).</li> <li>+5 line is shorted (A, B Boards).</li> <li>IC6007 is faulty (A Board).</li> </ul>	<ul style="list-style-type: none"> <li>No picture.</li> </ul>
Horizontal Deflection Stopped	7 times	7:0 or 7:1		<ul style="list-style-type: none"> <li>No picture.</li> </ul>

**Note 1:** If a +B Overcurrent is detected, stoppage of the Vertical Deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on screen.

**Note 2:** Refer to Screen (G2) Adjustment in Section 2-5. of this manual.

**Note 3:** If STANDBY/STEREO LED flashes six (6) times, unplug the unit and wait 10 seconds before performing the adjustment.

### Display of STANDBY/STEREO LED Flash Count



\* One flash count is not used for self-diagnostic.

### Stopping the STANDBY/STEREO LED Flash

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/STEREO LAMP from flashing.

### Self-Diagnostic Screen Display

For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes out" that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

### To Bring Up Screen Test

In standby mode, press buttons on the Remote Commander sequentially, in rapid succession, as shown below:

**DISPLAY** ➡ Channel **5** ➡ Sound volume **0** ➡ Power ON.

#### SELF DIAGNOSIS

2: +B OCP	N/A
3: +B OVP	N/A
4: V STOP	0
5: AKB	1
6: LOWB	0
7: H-STOP	0
101: WDT	24

Numerical "0" means that no fault was detected.

Numerical "1" means a fault was detected one time only.

### Handling of Self-Diagnostic Screen Display

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".

Unless the result display is cleared to "0", the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

### Clearing the Result Display

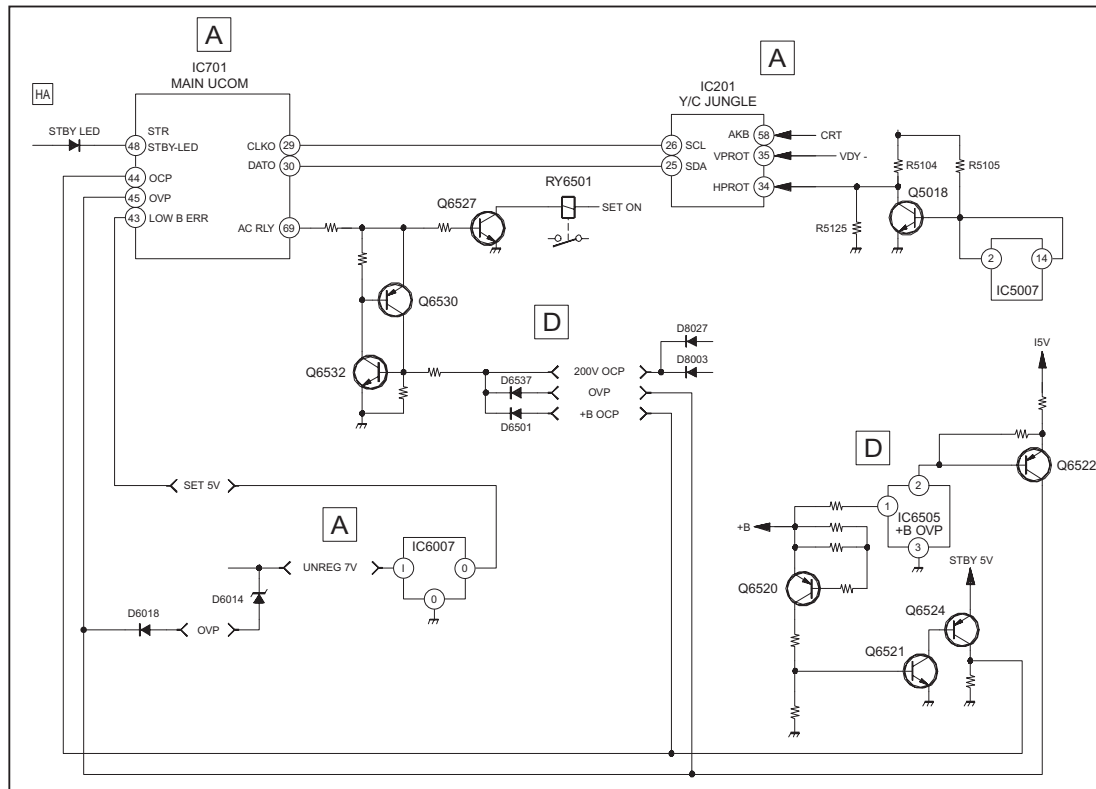
To clear the result display to "0", press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

Channel **8** ➡ **ENTER**

### Quitting the Self-Diagnostic Screen

To quit the entire self-diagnostic screen, turn off the power switch on the Remote Commander or the main unit.

### Self-Diagnostic Circuit



#### +B Overcurrent (OCP)

Occurs when an overcurrent (more than 6A) on the +B (135V) line is detected by R6598/R6591. It will cause Q6520 to turn on and force the AC relay to turn off through Q6532 and Q6530.

#### +B Overvoltage (OVP)

Occurs when 1) overvoltage (more than +140V) on the +B (135V) line is detected by IC6505, or 2) an overvoltage (more than 7.5 V) on the unreg 7V line is detected by D6014. The AC relay will turn off through Q6532 and Q6530.

#### Vertical Deflection Stopped

Occurs when an absence of the vertical deflection pulse is detected by IC201. Power supply will shut down when waveform interval exceeds 2 seconds.

### White Balance Failure

If the RGB levels\* do not balance within 2 seconds after the power is turned on, this error will be detected by IC201. TV will stay on, but there will be no picture.

\*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

### Low B OCP/OVP Error

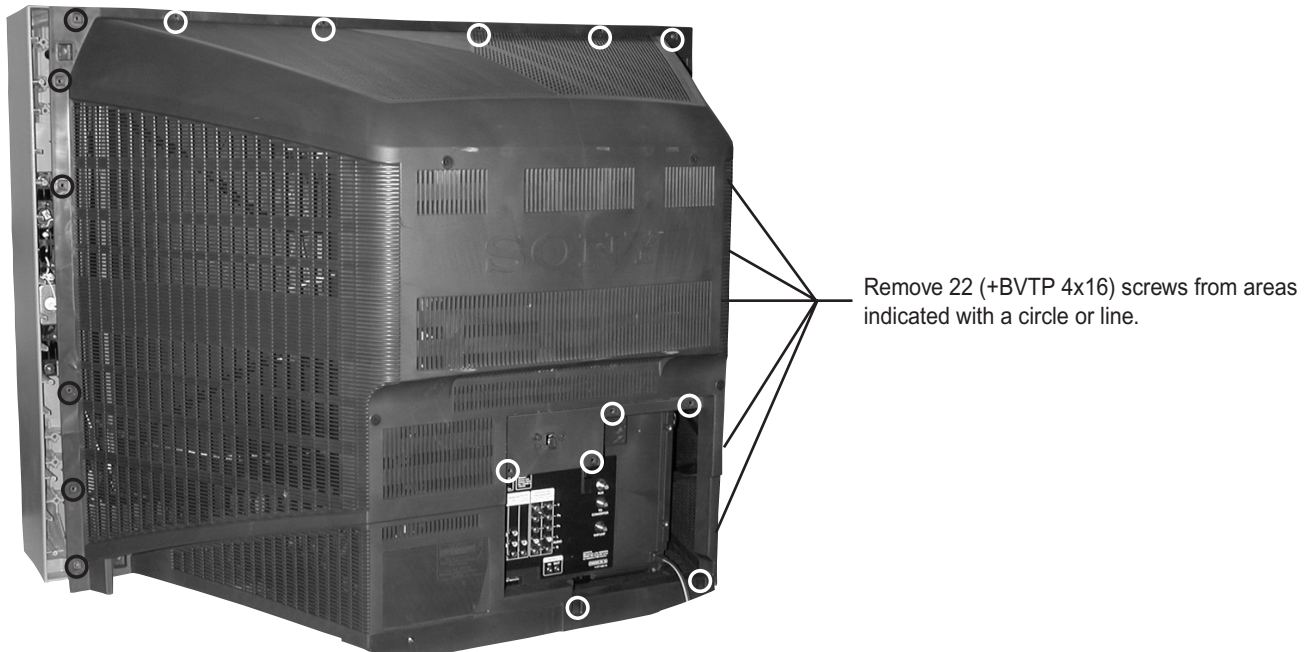
Occurs when set 5V is out.

### Horizontal Deflection Stopped

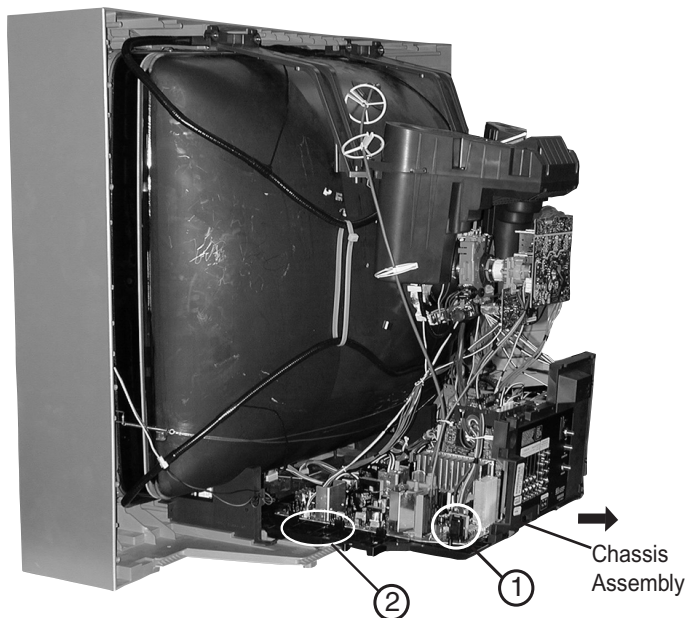
Occurs when either: 1) a +B overcurrent is detected (IC5007), or 2) overheating is detected (Thermistor TH5002).

## SECTION 1: DISASSEMBLY

### 1-1. REAR COVER REMOVAL

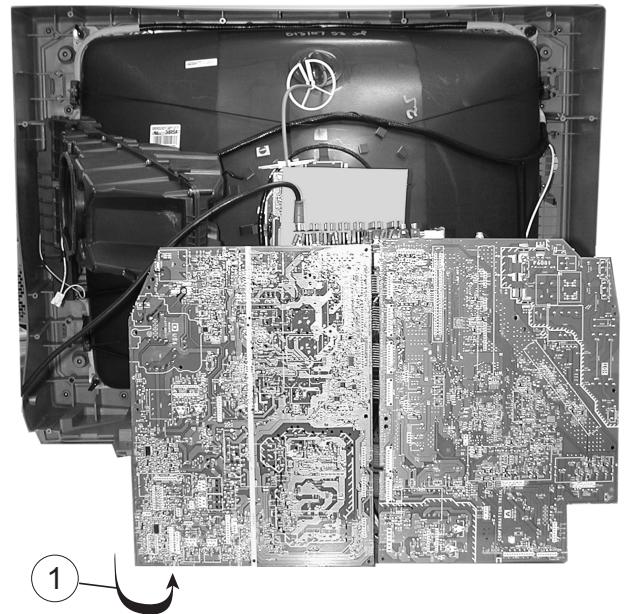


### 1-2. CHASSIS ASSEMBLY REMOVAL



- ① **CAUTION!** - Heat sink on IC5004 is -15V. Care must be taken not to allow heat sink to touch any other components.
- ② Gently pull the chassis assembly away from the bezel.

### 1-3. SERVICE POSITION



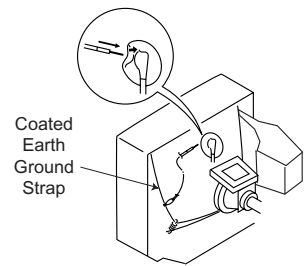
- ① Pull up and rotate both the A and D Boards in order to service the unit.



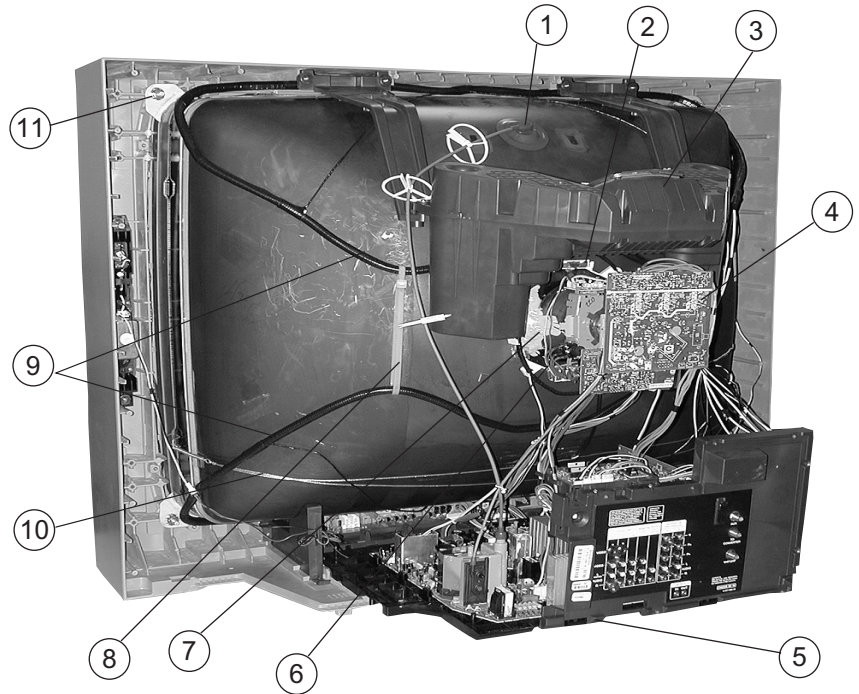
## 1-4. PICTURE TUBE REMOVAL

### WARNING: BEFORE REMOVING THE ANODE CAP

High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



- ① Discharge the anode of the CRT and remove the anode cap.
- ② Unplug all interconnecting leads from the deflection yoke, neck assembly, degaussing coils and CRT grounding strap.
- ③ Remove the Speaker Assemblies.
- ④ Remove the C Board from the CRT.
- ⑤ Remove the chassis assembly.
- ⑥ Loosen the neck assembly fixing screw and remove.
- ⑦ Loosen the deflection yoke fixing screw and remove.
- ⑧ Place the set with the CRT face down on a cushion and remove the degaussing coil holders.
- ⑨ Remove the degaussing coils.
- ⑩ Remove the CRT grounding strap and spring tension devices.
- ⑪ Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT [Take care not to handle the CRT by the neck].

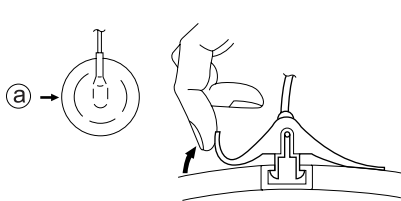


## ANODE CAP REMOVAL PROCEDURE

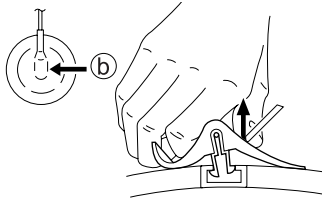
**WARNING:** High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT **before** attempting to remove the anode cap. Short between anode and coated earth ground strap of CRT.

**NOTE:** After removing the anode cap, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield, or carbon painted on the CRT.

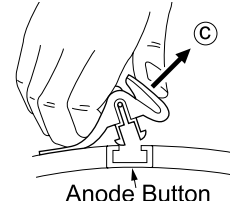
### REMOVAL PROCEDURES



Turn up one side of the rubber cap in the direction indicated by arrow (a) .



Use your thumb to pull the rubber cap firmly in the direction indicated by arrow (b) .

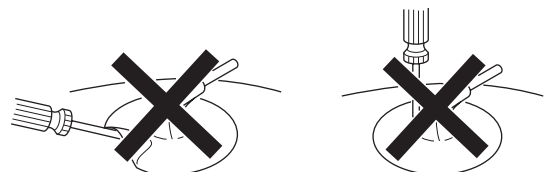


Anode Button

When one side of the rubber cap separates from the anode button, the anode cap can be removed by turning the rubber cap and pulling it in the direction of arrow (c) .

### HOW TO HANDLE AN ANODE CAP

1. Do not use sharp objects which may cause damage to the surface of the anode cap.
2. To avoid damaging the anode cap, do not squeeze the rubber covering too hard. A material fitting called a shatter-hook terminal is built into the rubber.
3. Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



## SECTION 2: SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch should be set as follows unless otherwise noted:

VIDEO MODE: STANDARD (RESET)

**Perform the adjustments in order as follows:**

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)
5. White Balance

**Test Equipment Required:**

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter

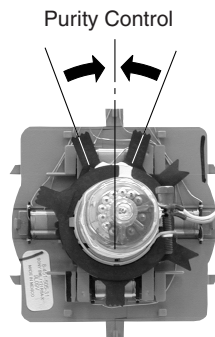
### 2-1. BEAM LANDING

#### Preparation:

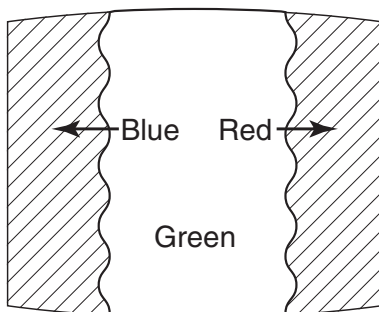
- Input a white pattern signal.
- Face the picture tube in an East or West direction to reduce the influence of geomagnetism.

**NOTE: Do not use the hand degausser; it magnetizes the CRT .**

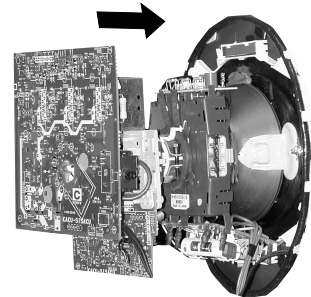
1. Input white pattern from pattern generator. Set the PICTURE control to maximum, and the BRIGHTNESS control to standard.
2. Perform Focus, G2 and White Balance adjustments.
3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown below:



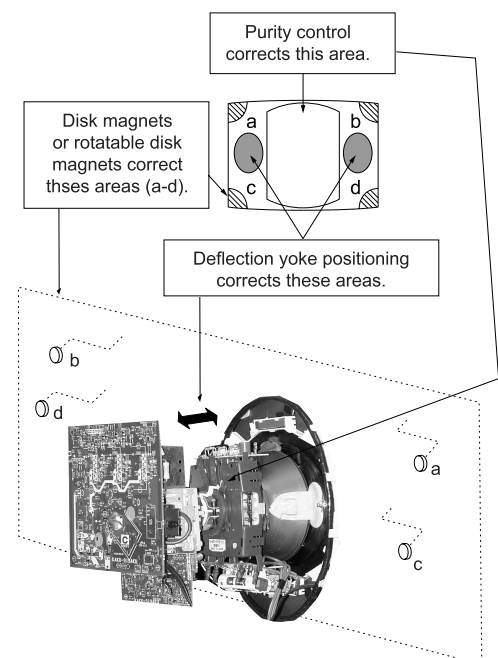
4. Input a green pattern from the pattern generator.
5. Move the deflection yoke backwards, and adjust with the purity control so that green is in the center and red and blue are even on both sides.



6. Move the deflection yoke forward, and adjust so that the entire screen becomes green.



7. Switch over the raster signal to red and blue and confirm the condition.
8. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
9. If landing at the corner is not right, adjust it by using the disk magnets.



## 2-2. V-PIN AND V-CEN ADJUSTMENT

### Preparation:

- Input a cross hatch pattern signal.
  - Face the picture tube in a North/South direction and correct rotation.
  - Set Video Mode to: Standard (Reset)
1. Adjust service mode CXA2150D-1 04 V-CEN so that the top pin and bottom pin are symmetrical from top to bottom.
  2. Adjust service mode CXA2150D-1 05 V-PIN so that the top pin and bottom pin are symmetrical from top to bottom.
  3. Lines should be straight from left to right. Check landing for side effect.

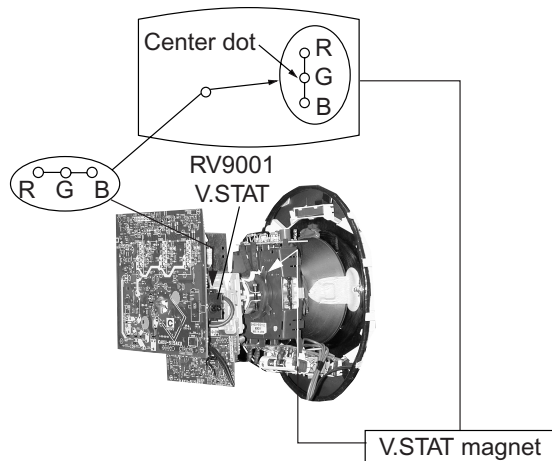
## 2-3. CONVERGENCE

### Preparation:

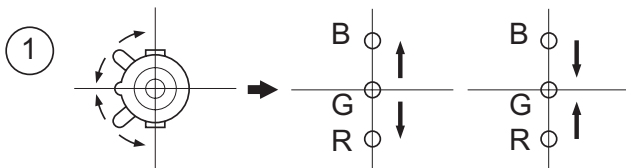
- Set the CONTRAST and BRIGHTNESS control to 50%.
- Input HD dot pattern.

### 2-3.1. VERTICAL AND HORIZONTAL STATIC CONVERGENCE

1. Disconnect the dynamic convergence before adjusting static convergence (CN5510), except for minor touch-up.
2. Adjust H.STAT convergence, RV9001, to converge red, green, and blue dots in the center of the screen.
3. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen.



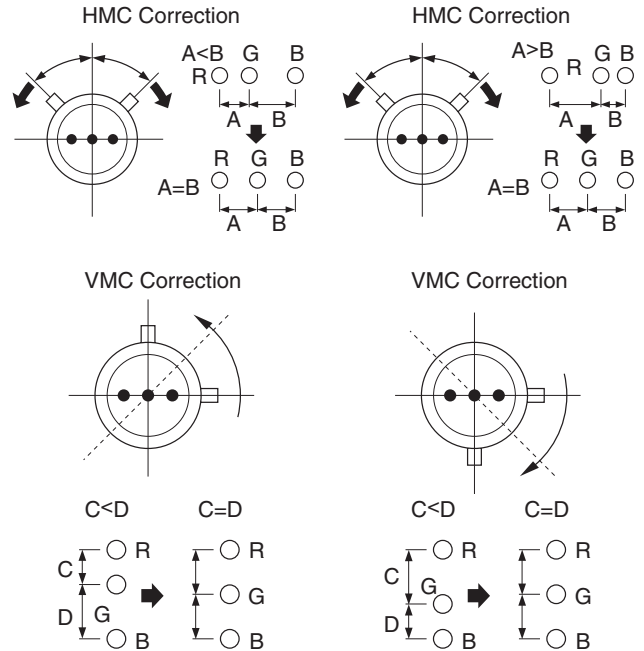
4. Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



### 2-3.2. OPERATION OF BMC (HEXAPOLE) MAGNET

The respective dot positions result from moving each magnet interact. Perform the following adjustments while tracking.

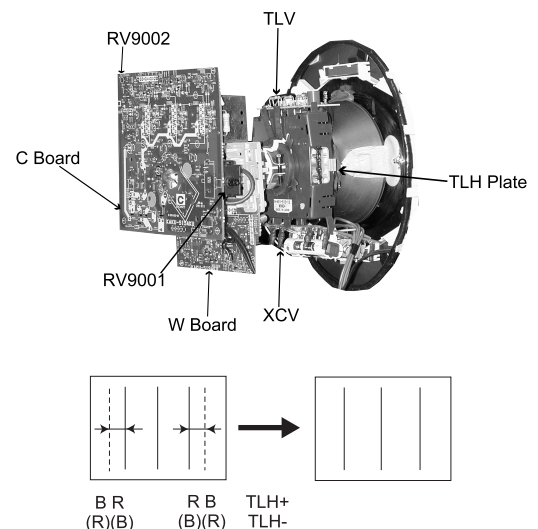
1. Use the V. STAT tabs to adjust the red, green and blue dots so that they line up at the center of the screen (move the dots in a horizontal direction).



### 2-3.3. TLH PLATE ADJUSTMENT

#### Preparation:

- Input a cross hatch pattern signal.
- Adjust PICTURE QUALITY to Standard, PICTURE and BRIGHTNESS to 50%, and OTHER to Standard.
- Adjust unbalanced horizontal convergence of red and blue dots by adjusting the TLH Plate on the deflection yoke.



1. Adjust XCV core to balance X axis.
2. Adjust the vertical red and blue convergence with V.TILT (TLV VR).

**Note:** Perform adjustments while tracking Item 1.

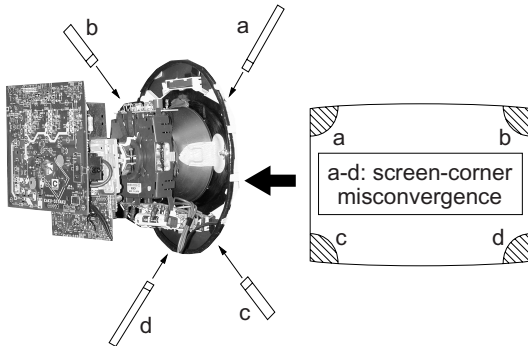


### 2-3.4. SCREEN-CORNER CONVERGENCE

#### Preparation:

- Input a cross hatch pattern signal.

- Affix a permalloy assembly corresponding to the misconverged areas.



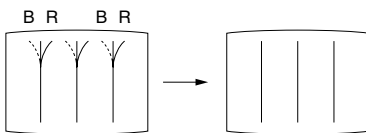
### 2-3.5. DYNAMIC CONVERGENCE ADJUSTMENTS

Set dynamic convergence using the following service mode adjustment data.

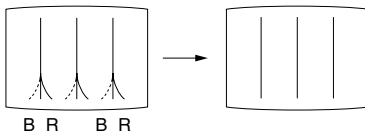
#### CXA8070AP

NO.	Register	Function	Data Length	Initial Data
1	YBWU	VCA9	0-63	31
2	YBWL	VCA10	0-63	31
3	RSAP	DC-AMP1	0-63	31
4	RUBW	VCA5	0-63	31
5	RLBW	VCA6	0-63	31
6	LSAP	DC-AMP2	0-63	31
7	LUBW	VCA10	0-63	31
8	LLBW	VCA2	0-63	31

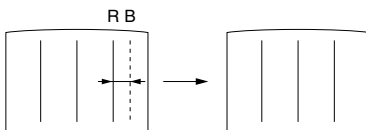
- YBWU (Upper Y-BOW)



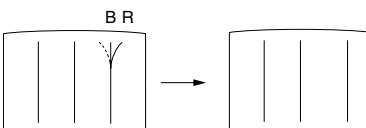
- YBWL (Bottom BOW)



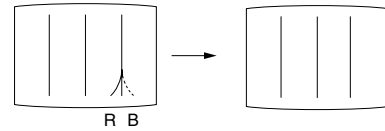
- RSAP (Right AMP)



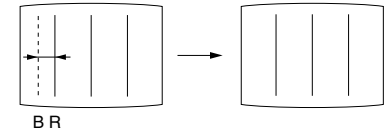
- RUBW (Right Side Upper C-BOW)



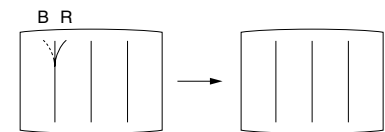
- RLBW (Right Side Bottom C-BOW)



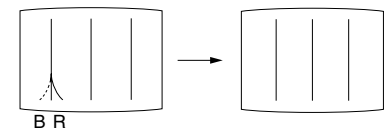
- LSAP (Left AMP)



- LUBW (Left Side Upper C-BOW)

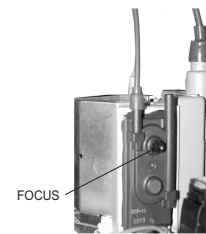


- LLBW (Left Side Bottom C-BOW)



### 2-4. FOCUS ADJUSTMENT

- Input a dot signal.
- Set Video Mode to STANDARD.
- Adjust focus VR counter-clockwise to confirm that the dot's shape is centered.
- Input a HP monoscope signal.
- Confirm center focus with focus VR.



DOT SHAPE:



### 2-5. SCREEN (G2)

- Input a monoscope pattern (NTSC).
- Set to service mode and adjust as follows:

#### CXA2150P-2

NO.	Disp.	Item	Avg.
0	ALBK	ALL_BLK	0

- Adjust RV9002 on the C Board so that the voltage on red, green and blue cathodes is  $175 \pm 2$  VDC.
- Adjust the horizontal line at the top of the screen so it is cut off.

**Note:** Never set ALBK to 1 when external power supply is connected to cathode.

## 2-6. PICTURE QUALITY ADJUSTMENTS

### Preparation:

- Set PRO MODE (Picture: MAX, GAMMA: 0).
- Dynamic-color: Off (=Trinitron: MID).
- Set the Service Mode to the following:

#### C2150P-4

NO.	Name	Control Function	Avg. Data
06	UDCL	Dynamic Color: OFF	0
08	UGRAM	GRAMMA	5
15	DCTR	DC-TRAN	2
16	DPIC	DYNAMIC PIC: OFF	1

- Input signal (480i):
  - Color Bar Video 75 IRE (White) 75% modulation 7.5% Set-up.
  - Color Bar RF 75 IRE (White) 75% modulation 7.5% Set-up.

### 2-6.1. VIDEO INPUT - TWO PICTURE SUB CONTRAST ADJUSTMENT

#### Preparation:

- Input a Color Bar signal to VIDEO 1 (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

- Set to Service Mode and adjust as follows:

#### 2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	0

#### 2150P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	4

### INITIAL DATA (IMPORTANT)

#### 2150P-4

NO.	Name	Control Function	Avg. Data
23	SCON	SUB-CONT	8

#### 2103-1

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

#### 2103-2

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

- Connect oscilloscope to Pin 1 of CN9001 (R.DRV) on the C Board.
- Adjust MAIN (left) side contrast according to Service Mode for SCON.

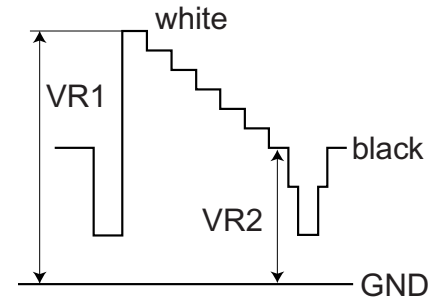
#### 2103-1

NO.	Name	Control Function
02	SCON	SUB-CONT

- Adjust SUB (right) side contrast according to Service Mode for SCON.

#### 2103-2

NO.	Name	Control Function
02	SCON	SUB-CONT



$$VR1-VR2 = \Delta VR = 2.08 \pm 0.05 V_{p-p}$$

- Write data from Steps 3 and 4 above, into memory.

### 2-6.2. VIDEO INPUT - SUB HUE/SUB COLOR ADJUSTMENT

#### Preparation:

- Input a Color Bar signal to VIDEO 1 (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

- Set to Service Mode and adjust as follows:

#### 2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	31

#### 2150P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	7

- Connect an oscilloscope to Pin 5 of CN9001 (B. DRV) on the C Board.
- Adjust MAIN (left) side color according to Service Mode for SCOL.
- Adjust MAIN (left) side color according to Service Mode for SHUE.

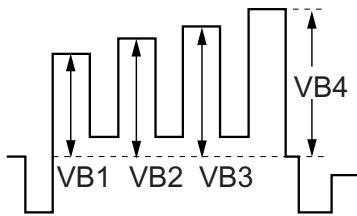
#### 2103-1

NO.	Name	Control Function
03	SCOL	SUB-COL
04	SHUE	SUB-HUE

- Adjust SUB (right) side color according to Service Mode for SCOL.
- Adjust SUB (right) side color according to Service Mode for SHUE.

#### 2103-2

NO.	Name	Control Function
03	SCOL	SUB-COL
04	SHUE	SUB-HUE



COLOR:  $VB1 \leq VB4$  ( $=VB1 + 0 \sim 90$  mV)

HUE:  $VB2 \leq VB3$  ( $=VB2 + 0 \sim 90$  mV)

(HUE: Adjust data -2 STEP)

7. Write data into memory.

### 2-6.3. RF INPUT - TWO PICTURE SUB CONTRAST ADJUSTMENT

#### Preparation:

- Input a Color Bar signal to RF (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

1. Set to Service Mode and adjust as follows:

#### 2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	0

#### 2150P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	4

### INITIAL DATA (IMPORTANT)

#### 2150P-4

NO.	Name	Control Function	Avg. Data
23	SCON	SUB-CONT	9

#### 2103-1

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

#### 2103-2

NO.	Name	Control Function	Avg. Data
00	YLEV	Y-OUT	23

**Note:** Use the same average data as 2-6.1., Items 3 - 4 after the adjustment.

2. Connect an oscilloscope to Pin 1 of CN9001 (R. DRV) on the C Board.
3. Adjust MAIN (left) side contrast according to service mode for SCON.

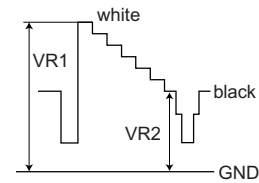
#### 2103-1

NO.	Name	Control Function
02	SCON	SUB-CONT

4. Adjust SUB (right) side contrast according to Service Mode for SCON.

#### 2103-2

NO.	Name	Control Function
02	SCON	SUB-CONT



$$VR1 - VR2 = \Delta VR = 2.08 \pm 0.05 \text{ Vp-p}$$

5. Write data from Steps 3 - 4 above, into memory.

### 2-6.4. RF INPUT - SUB HUE/SUB COLOR ADJUSTMENT

#### Preparation:

- Input a Color Bar signal to RF (75 IRE 75%).
- Set picture mode: P&P (PRO MODE).

1. Set to Service Mode and adjust as follows:

#### 2150P-4

NO.	Name	Control Function	Avg. Data
00	UPIC	PICTURE	63
02	UCOL	COLOR	31

#### 2150P-4

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	7

### INITIAL DATA (IMPORTANT)

#### 2150P-4

NO.	Name	Control Function	Avg. Data
24	CLOF	OFFSET for UCOL	8
25	HUOF	OFFSET for UHUE	4

#### 2103-1

NO.	Name	Control Function	Avg. Data
01	CLEV	CB & CR-OUT	20
20	CBOF	CB-OFFSET	31
21	CROF	CR-OFFSET	31

#### 2103-2

NO.	Name	Control Function	Avg. Data
01	CLEV	CB & CR-OUT	19
20	CBOF	CB-OFFSET	31
21	CROF	CR-OFFSET	31

**Note:** Use the same average data as 2-6.2., Items 3-6 after the adjustment.

2. Connect an oscilloscope to pin 5 of CN9001 (B. DRV) on the C Board.
3. Adjust MAIN (left) side color according to Service Mode for SCOL.
4. Adjust MAIN (left) side color according to Service Mode for SHUE.

#### 2103-1

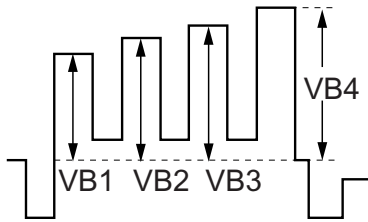
NO.	Name	Control Function
03	SCOL	SUB COLOR
04	SHUE	SUB HUE

5. Adjust SUB (right) side color according to Service Mode for SCOL.

6. Adjust SUB (right) side color according to Service Mode for SHUE.

**2103-2**

NO.	Name	Control Function
03	SCOL	SUB COLOR
04	SHUE	SUB HUE



COLOR:  $VB1 \leq VB4$  ( $=VB1 + 0 \sim 90$  mV)

HUE:  $VB2 \leq VB3$  ( $=VB2 + 0 \sim 90$  mV)

(HUE: Adjust data -2 STEP)

7. Write data into memory.

## 2-7. WHITE BALANCE (CRT) AND SUB BRIGHT ADJUSTMENT

### Preparation

- Input an all white 480i (15.734 KHz) signal into the VIDEO 1 input terminal to perform the White Balance (highlight, cut-off) adjustments. The parameters to adjust are in the CXA2150P in Service Mode.

1. Set the following:

Picture: Full Mode  
Pro Mode  
Color: Center

2. Adjust White Balance in the Service Mode and set the following data:

**2150P-1**

NO.	Name	Control Function	Avg. Data
05	RDRV	R-DRIVE	Fix: 46
06	GDRV	G-DRIVE	Adjust
07	BDRV	B-DRIVE	Adjust
08	RCUT	R-CUT OFF	Fix: 41
09	GCUT	G-CUT OFF	Adjust
10	BCUT	B-CUT OFF	Adjust

3. Adjust Sub Brightness: Input an all black signal (to IRE 7.5% set up) 480i (15.75 KHz) signal into the VIDEO 1 input terminal. Adjust the following parameter of CXA2150P-1:

4. Check Initial Data (Important).

**CXA2150P-1**

NO.	Name	Control Function	Avg. Data
04	SBRT	SUB-BRIGHT	20

**2150P-1**

NO.	Name	Control Function	Avg. Data
00	SBOT	SUB-BRT OFFSET	7
12	SBOF	SUB-BRT OFFSET	63

5. Repeat Steps 2-4.

## 2-8. RASTER CENTER ADJUSTMENT

### Preparation:

- Input a monoscope signal.
- Set to NTSC (DRC) mode.

1. Set to Service Mode and adjust as follows:

**CXA2150P-2**

NO.	Name	Control Function	Avg. Data
06	AGNG	AGING 1, AGING 2	2

**CXA2150D-2**

NO.	Name	Control Function	Avg. Data
02	HSIZ	Horiz Size	45

**CXA2150D-3**

NO.	Name	Control Function	Avg. Data
00	HBLK	Blanking Enable	0

- Reduce HSIZ to see sides of raster.
- Adjust H-Center with CXA2150D-2 00.
- Adjust to the best screen position with H-CENT and write data.
- Restore aging, HSIZ and HBLK to original condition.

## 2-9. PICTURE DISTORTION ADJUSTMENTS

### 2-9.1. NTSC (DRC) FULL MODE ADJUSTMENT

- Face the picture tube in an east-west direction.
- Complete V-PIN and V-CEN adjustments first (A2150-D1 05 V-PIN, A2150-D1 04 V-CEN).
- Input a monoscope and crosshatch signal. Adjust the picture distortion with the following service parameters to balance the best condition for these two signals.

A2150-D1	00	VPOS
A2150-D1	01	VSIZ
A2150-D1	02	VLIN
A2150-D1	03	VSCO
A2150-D1	04	VCEN
A2150-D1	05	VPIN
A2150-D1	07	HTPZ

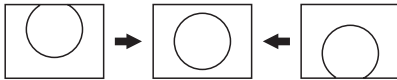
A2150-D2	01	HPOS
A2150-D2	02	HSIZ
A2150-D2	03	SLIN
A2150-D2	04	MPIN
A2150-D2	06	UCP
A2150-D2	07	LCP
A2150-D2	13	PPHA
A2150-D2	14	VANG
A2150-D2	15	LANG
A2150-D2	16	VBOW
A2150-D2	17	LBOW

**Note:** Make sure that the picture size is within specs. Vertical size is  $11.7 \pm 0.1$  sq. and horizontal size is  $15.6 \pm 0.1$  sq.

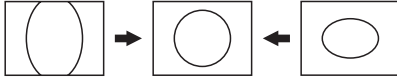
4. Write data into memory and then set the screen to 1080i mode.

**CXA2150D-1**

## 0. VPOS (V-POSITION)



## 1. VSIZ (V-SIZE)



## 2. VLIN (V-LINE)



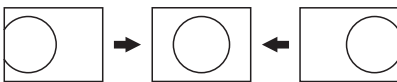
## 3. VSCO (VS-COR)



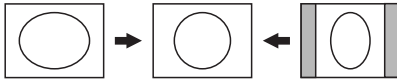
## 7. HTPZ (H-TRAPEZOID)

**CXA2150D-2**

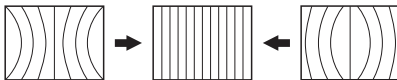
## 1. HPOS (H-POSITION)



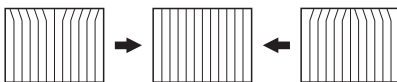
## 2. HSIZ (H-SIZE)



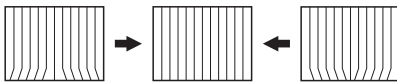
## 5. PIN (PIN AMP)



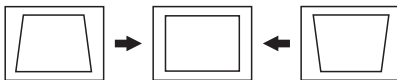
## 6. UCP (UP COR PIN COR)



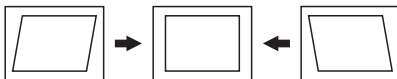
## 7. LCP (LOW CO PIN COR)



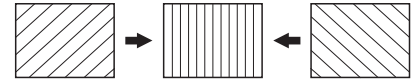
## 13. PPHA (PIN PHASE)



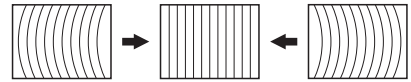
## 14. VANG (AFC-ANGLE)



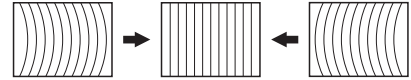
## 15. LANG (L-ANGLE)



## 16. VBOW (AFC-BOW)



## 17. LBOW (L-BOW)

**2-9.2. 1080i HD MODE ADJUSTMENT**

1. Input a 1080i cross-hatch signal and an HD monoscope signal that contains overscan markers.
2. Adjust the raster position per Section 2-8., only if this procedure was not performed for full mode.
3. Adjust the geometry similar to Full DRC mode. Vertical size is  $11.7 \pm 0.1$  sq. and horizontal size is  $15.6 \pm 0.1$  sq., if monoscope signal is available. Otherwise, set the Vertical size to  $91.0 \pm 0.6\%$  scan and Horizontal size as  $91.0 \pm 0.6\%$  scan.
4. Use the following register to adjust the horizontal parameter:

A2150-D2	01	HPOS
----------	----	------

**Note:** If necessary, touch up the geometry using the data register listed above for Full mode.

5. Write the data into memory.

**2-9.3. VERTICAL COMPRESSED MODE CHECK AND CONFIRMATION**

1. Input a monoscope and crosshatch signal.
2. Check vertical compressed mode.

## SECTION 3: SAFETY RELATED ADJUSTMENTS

### 3-1. RV8001, RV8002 CONFIRMATION METHOD AND HV SERVICE ADJUSTMENTS

#### 3-2. B+ MAX CONFIRMATION

Standard ..... 135.3  $\pm$  1 VDC

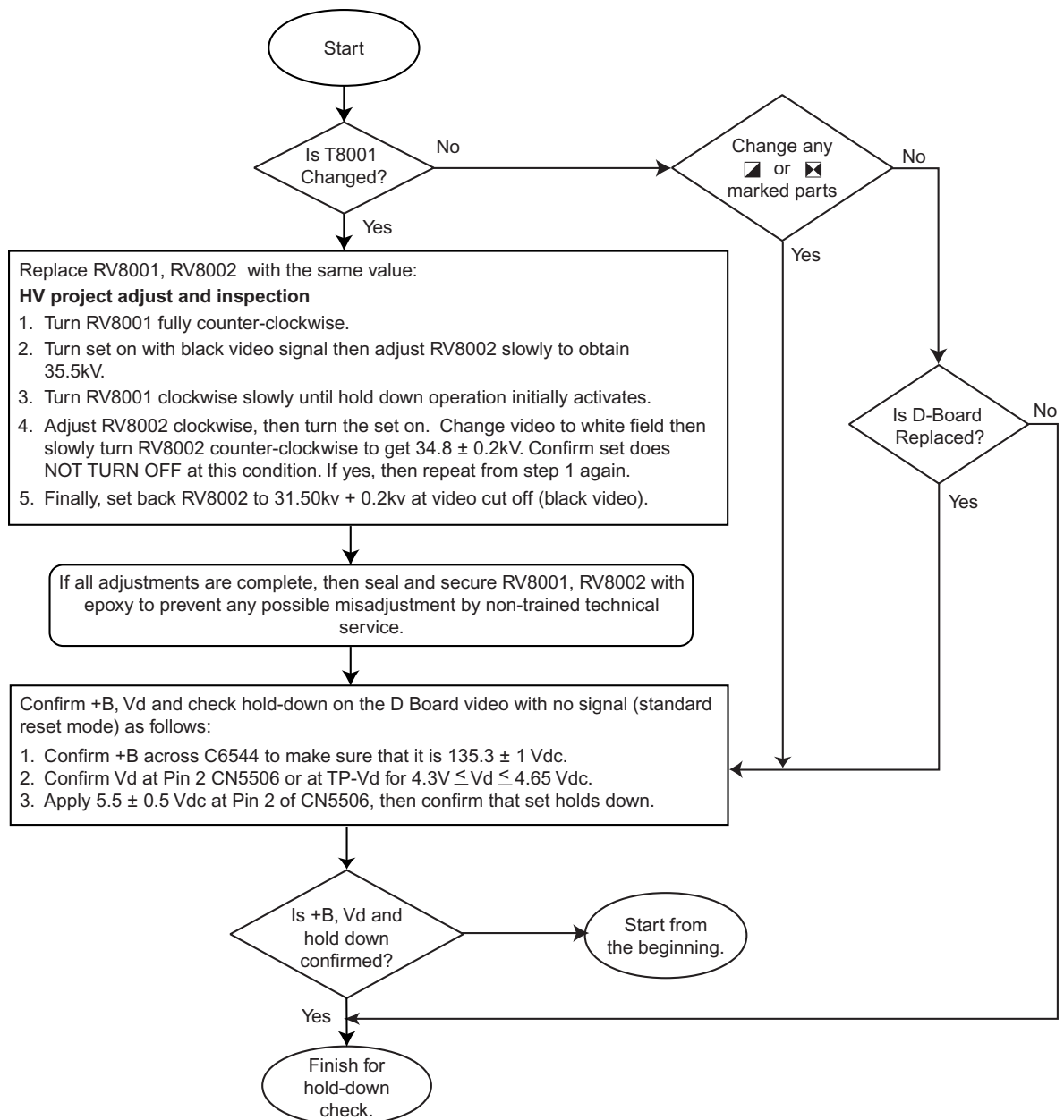
Check Condition:

- AC input voltage:** 120 ( $\pm$  2) VAC at Board Adjustment Process  
 130 ( $\pm$  2) VAC at QC  
 120 ( $\pm$  2) VAC at Overall Adjustment (after aging)

**Note:** If using a stabilized power supply, make sure that the distortion factor is 3% or less.

**Setting Mode:** ..... Full mode  
**Signal Input:** ..... Cross-hatch of NTSC at QC  
**Initial Setting:** ..... Reset condition at QC  
**Confirm Point:** ..... Across C6544 for B+ of D Board

#### 3-3. HV SERVICE FLOWCHART



## SECTION 4: CIRCUIT ADJUSTMENTS

### ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

Use the Remote Commander (RM-Y184) to perform the circuit adjustments in this section.

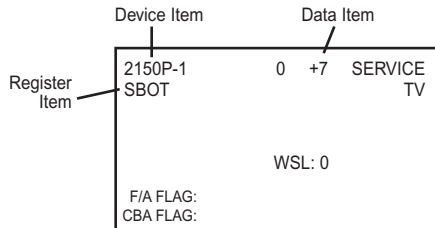
**Test Equipment Required:** 1. Pattern generator 2. Frequency counter 3. Digital multimeter 4. Audio oscillator

#### 4-1. SETTING THE SERVICE ADJUSTMENT MODE

1. Standby mode (Power off).
2. Press the following buttons on the Remote Commander within one second of each other:

**DISPLAY** → Channel **5** → Sound Volume **+** → Power

#### SERVICE ADJUSTMENT MODE VIEW



#### READING THE MEMORY

1. Enter into Service Mode.
2. Press **0** on the Remote Commander.
3. Press **ENTER** to read memory.

#### ADJUSTING THE PICTURE

1. Enter into Service Mode
2. Press **2** or **5** on the remote to select the device item.
3. Press **1** or **4** on the remote to select an item.
4. Press **3** or **6** on the remote to change the data.
5. Press **MUTING** then **ENTER** to write into memory.

##### 4-1.1. RESETTING THE DATA

**Note:** Be careful when using the remote! It will clear and re-initialize ALL NVM data including deflection adjustment data if not reset properly as follows:

#### RESETTING THE DEFLECTION NVM DATA

1. Enter into Service Mode.
2. Press **7**, then **MENU**, and then press **ENTER** on the remote.

#### RESETTING THE SYSTEM NVM DATA

1. Enter into Service Mode.
2. Press **7**, then **9**, and then press **ENTER** on the remote.

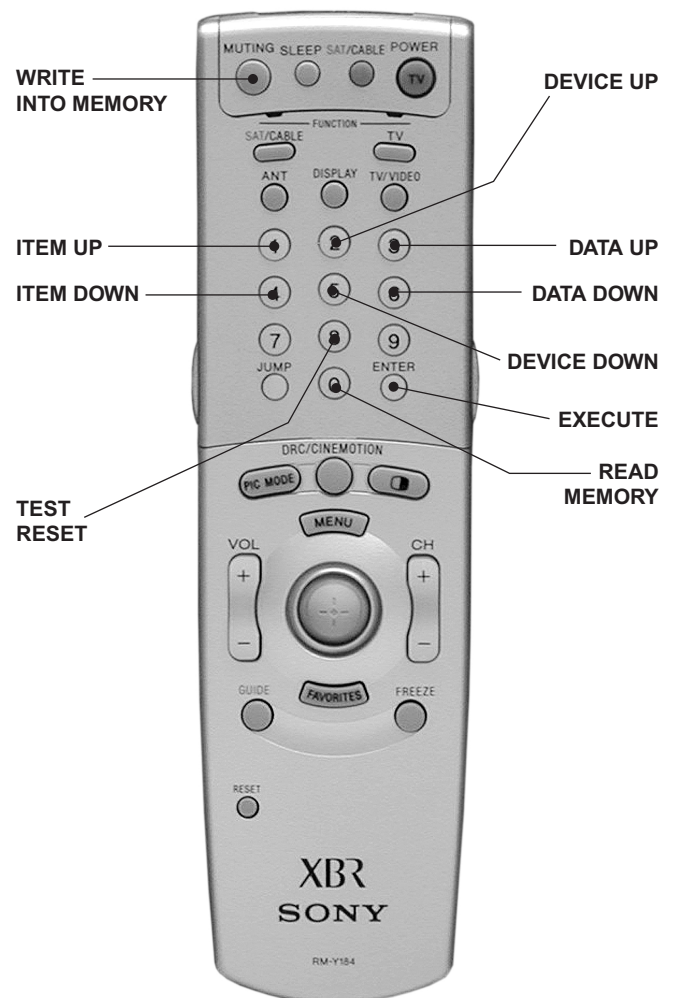
#### RESETTING THE SYSTEM NVM DATA

1. Enter into Service Mode.
2. Press **8** and then press **ENTER** on the remote.

#### 4-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

#### 4-3. REMOTE ADJUSTMENT BUTTONS AND INDICATORS



RM-Y184



#### 4-4. SERVICE DATA LISTS

KV-40XBR700

DX1A-2001* Service List ----- Contents & Notes					
Category Number & Name		Device Name	Device Reference Number	Slave Address	Comment
# 1	3D-COMB	μPD64082	IC3501 / BC-board	B8h (W) & B9h (R)	W&R: Write & Read
# 2-1	CXA2103-1 (Main)	CXA2103Q	IC3048 (Main) / B-board	9Ah	
# 2-2	CXA2103-2 (Sub)		IC3110 (Sub) / B-board	9Eh	
# 3-1	CXA2150P-1	CXA2150Q	IC201 / A-board	86h	
# 3-2	CXA2150P-2				
# 3-3	CXA2150P-3				
# 3-4	CXA2150P-4				
# 4-1	CXA2150D-1	CXA2150Q	IC201 / A-board	86h	
# 4-2	CXA2150D-2				
# 4-3	CXA2150D-3				
# 5	CXA2151	CXA2151Q	IC3001 / B-board	84h	
# 6	D-CONV	CXA8070P	IC5513 / D-board	DEh	
# 7	CXA2026	CXA2026AS	IC5511 / D-board	8Eh	
# 8	AP	BH3868FS	IC7001 / A-board	82h	
# 9	TRUS	NJM2180M	IC4101 / S-board	2Eh	Controlled through CXA1315M ( IC4103 / S-board / 48h )
# 10	MID1	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro ( IC3090 / B-board / 64h )
# 11	MID2	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro ( IC3090 / B-board / 64h )
# 12	MID3	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro ( IC3090 / B-board / 64h )
# 13	MID5	CXD9509AQ	IC3408 / B-board	2Eh	Controlled through MID-XA Micro ( IC3090 / B-board / 64h )
# 14	OSD	M306V2ME-153FP	IC701 / A-board	60h	DX1A-2001 System Micro {V1.0}
# 15	SNNR	μPD64082	IC3501 / BC-board	B8h (W) & B9h (R)	
		CXA2103Q	IC3048 (Main) / B-board	9Ah	
		CXA2150Q	IC201 / A-board	86h	
# 16	ID1	CXD2085M	IC3603 / B-board	40h	
# 17	CCD&VCHIP	CXP85840A-039Q	IC3602 (Main) / B-board	68h (Main)	CCD&Vchip Micro (V2.14)
			IC3601 (Sub) / B-board	6Ch (Sub)	
# 18	OP	M306V2ME-153FP	IC701 / A-board	60h	DX1A-2001 System Micro {V1.0}
# 19	ID	M306V2ME-153FP	IC701 / A-board	60h	DX1A-2001 System Micro {V1.0}
DX1A-2001 System Micro & Notes for Services		M306V2ME-153FP (MASK), Software Version 1.0, IC701/A-board (Slave Adress: 60h)			
		The system micro name, software&patch versions, and the status of NVM devices are displayed only when in the service catgory (#19): ID.			
DX1A-2001 MID-XA Micro		MB94918RPF-G-137-BND (MASK), Software Version 12/08/00, IC3090/B-board (Slave Address: 64h)			
DX1A-2001 CCD&Vchip Micros		CXP85840A-039Q (MASK), Software Version 2.14, IC3602/B-board (Main/Slave Address: 68h) & IC3601/B-board (Sub/Slave Address: 6Ch)			
Note:					
* This service list is used for DX1A-2001 ONLY. Some service data is the same in DX1A-2001 & 2000, as noted in the data sheets.					



DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-1/4)									
Device Name: mPD64082GF { 3D-Comb Filter / NEC } / IC3501 (BC-board) / P/N: 8-759-594-44 (SB#: V7372)									
Slave Address: B8h (Write Address) / B9h (Read Address)									
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Comment	
				UHF/VHF & CVideo		SVideo		CVideo (CV): CVideo1~4 inputs SVideo (SV): SVideo1~3 inputs	
				Standard	Non-standard	Standard	Non-standard		
0	NRMD	Operation mode setting	0~3	0	1	3	3		
1	YAPS	Y-output correction (V-aperture compensation & Y-peaking filtering)	C	0~3	3			C: Common data	
2	CLKS	System clock setting	C	0~3	1				
				UHF/VHF & CVideo		SVideo			
				Standard	Non-standard	Standard	Non-standard		
3	NSDS	Selection for standard/non-standard signal processing		0~3	0	0	0		
4	MSS	Selection for inter-frame/inter-line processing	C	0~3	0				
5	KILS	Killer processing selection	C	0~3	1				
6	CDL	C-signal phase with respect to the Y-signal (Fine adjustment at 70 ns/step)	C	0~7	3				
	NRMD Setting-based Control Table for DYCO, DYGA, DCCO, DCGA								
7	DYCO	DY detection coring level (Y motion detection coring)		0~15	NRMD = 0	NRMD = 1	NRMD = 2	NRMD = 3	
8	DYGA	DY detection gain (Y motion detection gain)		0~15	2	2	2	2	
9	DCCO	DC detection coring level (C motion detection coring)		0~15	10	10	10	10	
10	DCGA	DC detection gain (C motion detection gain)		0~15	5	5	5	5	
11	YNRL	Frame recersive YNR nonlinear filter limit level	C	0~3	5	5	5	5	
12	CNRL	Frame recersive CNR nonlinear filter limit level	C	0~3	1				
					1				
					UHF/VHF		Video1~4	Video5&6	Video1~4: CVideo1~4 & SVideo1~3 inputs Video5&6: YPbPr-480i/480p/1080i inputs
13	VTRH	Hysteresis for Hsync non-standard signal detection (out-of-Hsync intra-field)		0~3	1	1	1		
14	VTRR	Sensitivity for Hsync non-standard signal detection (out-of-Hsync intra-field)		0~3	1	1	1		
15	LDSR	Sensitivity for frame non-standard signal detection (out-of-Hsync inter-frame)		0~3	2	2	2		
	VM&SNNR Setting-based Control Table for VAPG & VAPI VAPG= VAPG1 - VAPG2				VAPG1 Data Based on MENU/VM Setting				This setting continues to the next page.
					VM = Off	VM = Low	VM = Mid	VM = High	
16	VAPG	V-aperture compensation gain		0~7	0	2	3	4	
17	VAPI	V-aperture compensation convergence point		0~31	4	4	4	8	
	SNNR Setting-based Control Table for YPFT & YHFG				SNNR Setting (-Offset)				
					SNNR = 0		SNNR = 1	SNNR = 2	SNNR = 3
18	YPFT	Y peaking filter (BPF) center frequency		0~3	0	0	0	0	0
19	YPFG	Y peaking filter (BPF) gain		0~15	7	0	1	2	3
Note: The same 3D-COMB service data is used for DX1A-2001&2000.									

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-2/4)						
Register No & Name	Data Initial/Average Setting (32V&36V CRTs)			Comment		
	VAPG2 Data Based on SNNR/Offset-setting					
	SNNR = 0	SNNR = 1	SNNR = 2			SNNR = 3
#16 VAPG (cont.)	0	0	0			0
Note: The same 3D-COMB service data is used for DX1A-2001&2000.						

## DX1A-2001&amp;2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-3/4)

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-3/4)									
Register No. & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Comment
		SNNR Setting-based Control Table for YHCO & YHCG			SNNR = 0	SNNR = 1	SNNR = 2	SNNR = 3	(Not SNNR Offset Data)
20	YHCO	Y output high frequency component coring		0~3	1	1	1	1	YHCO&YHCG settings are sent directly to 3D-Comb
21	YHCG	Y output high frequency component coring gain		0, 1	0	0	0	0	
22	HSSL	Hsync slice level	C	0~15	12	C: Common data			
23	VSSL	Vsync slice level	C	0~15	8				
24	ADCL	ADC clock delay	C	0~3	3				
		NRMD Setting-based Control Table for D2GA			NRMD = 0	NRMD = 1	NRMD = 2	NRMD = 3	
25	D2GA	Moving detection gain		0~7	4	4	4	4	
26	KILR	Killer detection reference	C	0~15	3				
27	OP1	Option1: Selection of comb filter & recursive noise reduction types	C	0, 1	1				
					UHF/VHF	CVideo1	SVideo1	This setting continues to the next page.	
28	NR1	Noise reduction on/off		0, 1	0	0	1		
29	NR2	SNNR control on/off	C	0, 1	0				
30	WSL	Noise level detection data		0~255	1 Byte Data from Read Register WSL				
31	HPLL	H-PLL filter (Must be set to 1 when MN signal is input.)	C	0, 1	1				
32	BPLL	Burst PLL filter	C	0, 1	1				
33	FSCF	Burst extraction gain	C	0, 1	0				
34	PLL	PLL loop gain	C	0, 1	1				
					UHF/VHF	Video1~4	Video5&6	Video1~4: CVideo1~4 & SVideo1~3 inputs Video5&6: YPbPr-480i/480p/1080i	
35	CC3N	Selection of a line-comb filter C separation filter characteristic		0, 1	0	0	0		
36	HDP	Fine adjustment of the system H-phase	C	0~7	5				
37	BGPS	Internal burst gate start position {Gate Start Position from Hsync center = 0.25 x BGPS + 2 (ms)}	C	0~15	4				
38	BGPW	Internal burst gate width {Gate Width = 0.25 x BGPW + 0.5 (ms)}	C	0~15	10				
39	TEST	Test bit {0: Normal mode, 1: Test mode (forbidden setting)	C	0, 1	0				
40	WSC	Amount of noise detection coring	C	0~3	1				
					UHF/VHF & Video1~4		Video5&6	This setting is used for non-standard signals such as Play Station signals.	
41	LIND	DRC-M line-doubling setting for non-standard signals	Micro	0~63	0		2		
42	PFGO	(YPFG offset at GR on) --- Not used for DX1A	---	0~7	3	(Not used for DX1A)			
Note: The same 3D-COMB service data is used for DX1A-2001&2000.									

Note: The same 3D-COMB service data is used for DX1A-2001&amp;2000.

DX1A-2001&2000 SERVICE LIST (#1): 3D-COMB / mPD64082 (Part-4/4)					
Register No & Name	Data Initial/Average Setting (32V&36V CRTs)				Comment
	CVideo2	SVideo2	CVideo3	SVideo3	
#28 NR1 (cont.)	0	1	0	1	
Note: The same 3D-COMB service data is used for DX1A-2001&2000.					

DX1A-2001&2000 SERVICE LIST (#2-1): CXA2103-1 {Main}													
Device Name: CXA2103Q { NTSC-YCT (Chroma Decoder) / SONY } / IC3048 (B-board) / P/N: 8-752-089-50 (SBorSD#: NA)													
Slave Address: 9Ah { Main }													
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial Setting & [Average Data] (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Note
					UHF/VHF & Video		YPbPr-480i		Video: CVideo1~4 & SVideo1~3 Inputs P&P-Left (M)-1080i&480i: If P&P-Left is 1080i/480p signal, the signal from the main chroma decoder is sent to MID/VDO input. *: Settings not used				
					P&P-Left (M)-DRC	P&P-Left (M)-1080i	P&P-Left (M)-DRC	P&P-Left (M)-480i					
0	YLEV	Y-Out gain		0~63	23	27*	35	31*	Adj.: Adjusted data [Adj.-2steps]: The adjusted data - 2 steps				
1	CLEV	Cb&Cr-Out gains		0~63	20	55*	37	31*					
					UHF/VHF		Video		SNNR=0 (-offset)   SNNR=1 (-offset)   SNNR=2 (-offset)   SNNR=3 (-offset) 0   1   2   3				
					7 [7]		7 [7]						
2	SCON	Sub contrast	Adj.	0~15	7 [7]		7 [7]		CVideo: CVideo1~4 Inputs SVideo: SVideo1~3 Inputs				
3	SCOL	Sub color	Adj.	0~15	7 [7]		7 [7]						
4	SHUE	Sub hue	Adj.	0~15	7 [Adj.-2steps]		7 [Adj.-2steps]		UHF/VHF   CVideo   SVideo   YPbPr 480i 6   4   4   4				
5	YDLY	Y/C delay time		0~3	0		0						
		SNNR Data-related Settings							UHF/VHF   Video   YPbPr 480i 1   0   0				
6	SHAP	Sharpness		0~15	6	4	4	4	UHF/VHF   Video   YPbPr 480i 3   3   3				
7	SHF0	Sharpness f0 selector		0~3	0	0	0	0					
8	PREO	Sharpness pre/over-shoot ratio		0~3	3	0	0	0	UHF/VHF   Video   YPbPr 480i 0   0   0				
9	BPF0	Chroma band filter f0 setting		0~3	3	0	0	0					
10	BPFQ	Chroma band filter Q setting		0~3	0	3	3	3	UHF/VHF   Video   YPbPr 480i 7   7   7				
11	BPSW	Chroma band filter on/off		0, 1	1	0	0	0					
12	TRAP	Y bolck chroma trap filter on/off		0, 1	0	0	0	0	UHF/VHF & Video   YPbPr-480i				
13	LPF	YPbPr-Output LPF on/off		0, 1	0	0	0	0					
									P&P & Favorite				
14	AFCG	AFC Loop Gain (PLL between Hsync & HVCO)		0, 1	1	0	0		UBLK = 0   UBLK = 1   UBLK = 2   UBLK = 3				
15	CDMD	V countdown system mode selector		0~3	3	3	3						
16	SSMD	H&Vsync slide level setting		0~3	0	0	0		P&P & Favorite				
17	HMSK	Masking of macrovision signal on/off		0, 1	1	1	1						
18	HALI	H automatic adjustment on/off		0, 1	0	0	0		UBLK = 4   UBLK = 5   UBLK = 6   UBLK = 7				
19	PPHA	H TIM phase adjustment for video		0~15	7	7	7						
					UHF/VHF & Video		YPbPr-480i		*: Settings not used (31): The center setting = 31				
					P&P-Left (M)-DRC	P&P-Left (M)-1080i	P&P-Left (M)-DRC	P&P-Left (M)-480i					
20	CBOF	Cb-Offset1 of Cb IN (Pin34) Cb-Offset2 of EXT Cb (Pin38)		0~(31)~63	31	31*	31	31*	P&P & Favorite				
21	CROF	Cr-Offset1 of Cr IN (Pin35) Cr-Offset2 of EXT Cr (Pin39)		0~(31)~63	31	31*	31	31*					
	CXA2150P-4/#13 UBLK Setting-related Controls for ATPD & DCTR				P&P & Favorite				P&P & Favorite				Single
					UBLK = 0	UBLK = 1	UBLK = 2	UBLK = 3	UBLK = 4	UBLK = 5	UBLK = 6	UBLK = 7	UBLK = 0~7
22	ATPD	Auto-pedestal Inflection Point		0~3	0	1	2	3	1	2	3	2	0
23	DCTR	DC Transmission Ratio		0~3	0	1	1	1	2	2	2	3	0
Note: The same CXA2103 service data (Main&Sub) is used for DX1A-2001&2000.													

Note: The same CXA2103 service data (Main&Sub) is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#2-2): CXA2103-2 {Sub}														
Device Name: CXA2103Q { NTSC-YCT (Chroma Decoder) / SONY } / IC3110 (B-board) / P/N: 8-752-089-50 (SBorSD#: NA)														
Slave Address: 9Eh { Sub }														
Register No & Name		Control Register Function & Link		Data Type	Data Range	Data Initial Setting & [Average Data] (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Note
						UHF/VHF & Video				Video: CVideo1~4 & SVideo1~3 Inputs P&P-Right (S)-DRC: If P&P-Left is 1080i/480p signal, the signal from the sub chroma decoder is switched to DRC path.				
						P&P-Right (S)	P&P-Right (S)-DRC							
0	YLEV	Y-Out gain			0~63	23	28							
1	CLEV	Cb&Cr-Out gains			0~63	18	24			Adj.: Adjusted data [Adj.-2steps]: The adjusted data - 2 steps				
						UHF/VHF		Video						
2	SCON	Sub contrast	Adj.	0~15		7	[7]	7	[7]					
3	SCOL	Sub color	Adj.	0~15		7	[7]	7	[7]	SNNR=0 (-offset) 0 SNNR=1 (-offset) 1 SNNR=2 (-offset) 2 SNNR=3 (-offset) 3				
4	SHUE	Sub hue	Adj.	0~15		7 [Adj.-2steps]		7 [Adj.-2steps]						
5	YDLY	Y/C delay time		0~3		0		0						
		SNNR Data-related Settings					UHF/VHF	CVideo	SVideo	CVideo: CVideo1~4 Inputs SVideo: SVideo1~3 Inputs				
6	SHAP	Sharpness		0~15		6	4	4						
7	SHF0	Sharpness f0 selector		0~3		0	0	0						
8	PREO	Sharpness pre/over-shoot ratio		0~3		3	0	0						
9	BPF0	Chroma band filter f0 setting		0~3		0	0	0						
10	BPFQ	Chroma band filter Q setting		0~3		0	0	0						
11	BPSW	Chroma band filter on/off		0, 1		0	0	0						
12	TRAP	Y bolck chroma trap filter on/off		0, 1		0	0	0						
13	LPF	YPbPr-Output LPF on/off		0, 1		0	0	0						
						UHF/VHF		Video						
14	AFCG	AFC Loop Gain		0, 1		1	0							
15	CDMD	V countdown system mode selector		0~3		3	3							
16	SSMD	H&Vsync slide level setting		0~3		0	0							
17	HMSK	Masking of macrovision signal on/off		0, 1		1	1							
18	HALI	H automatic adjustment on/off		0, 1		0	0							
19	PPHA	H TIM phase adjustment for video		0~15		7	7							
						UHF/VHF & CVideo		YPbPr-480i		*: Settings not used (31): The center setting = 31				
						P&P-Right (S)	P&P-Right (S)-DRC	P&P-Right (S)	P&P-Right (S)-DRC					
20	CBOF	Cb-Offset1 of Cb IN (Pin34) Cb-Offset2 of EXT Cb (Pin38)		0~(31)~63		31	31	31*	31*					
21	CROF	Cr-Offset1 of Cr IN (Pin35) Cr-Offset2 of EXT Cr (Pin39)		0~(31)~63		31	31	31*	31*	P&P & Favorite				Single
	CXA2150P-4/#13 UBLK Setting-related Controls for ATPD & DCTR					P&P & Favorite								
						UBLK = 0	UBLK = 1	UBLK = 2	UBLK = 3	UBLK = 4	UBLK = 5	UBLK = 6	UBLK = 7	UBLK = 0~7
22	ATPD	Auto-pedestal Inflection Point		0~3		0	1	2	3	1	2	3	2	0
23	DCTR	DC Transmission Ratio		0~3		0	1	1	1	2	2	2	3	0
Note: The same CXA2103 service data (Main&Sub) is used for DX1A-2001&2000.														

Note: The same CXA2103 service data (Main&Sub) is used for DX1A-2001&2000.

DX1A-2001&2000 SERVICE LIST (#3-1): CXA2150P-1 {Picture Controls: P1}												
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)												
Slave Address: 86h												
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)						Comment	
					UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	CV: CVideo1~4 SV: SVideo1~3 ( ): Settings at center
0	SBOT	Offset for SBRT		0~(7)~15	7	7	7	7	7	7	7	
1	YOF	Y_OFFSET: DC-offset for Y signal		0~(7)~15	0	0	0	0	0	0	0	
2	CBOF	CB_OFFSET: DC-offset for Cb signal		0~(31)~63	31	31	31	33	30	31	13	
3	CROF	CR_OFFSET: DC-offset for Cr signal		0~(31)~63	31	31	31	42	36	31	23	
4	SBRT	SUB_BRIGHT: Sub Bright	Adj.	0~63	24 [24]						Adj.: Adjusted data C: Common data	
5	RDRV	R_DRIVE: R output drive	C	0~63	46							
6	GDRV	G_DRIVE: G output drive	Adj.	0~63	36 [36]							
7	BDRV	B_DRIVE: B output drive	Adj.	0~63	33 [33]							
8	RCUT	R_CUTOFF: R output cutoff	C	0~63	41						Initial Setting = [Avg. Data]	
9	GCUT	G_CUTOFF: G output cutoff	Adj.	0~63	11 [11]							
10	BCUT	B_CUTOFF: B output cutoff	Adj.	0~63	22 [22]							
					Vivid		Standard		Movie		Pro	
11	WBSW	WB_SW: White balance offset on/off (Related to UTMP settings)		0, 1	0 (Cool)		0 (Neutral)		1 (Warm)		0	
12	SBOF	Offset for SBRT		0~(63)~127	63		63		63		63	**: The color temperature offset data
13	RDOF	Offset for RDRV		0~(63)~127	63		63		63**		63	
14	GDOF	Offset for GDRV		0~(63)~127	63		63		66**		63	
15	BDOF	Offset for BDRV		0~(63)~127	63		60		73**		63	
16	RCOF	Offset for RCUT		0~(63)~127	63		63		63**		63	
17	GCOF	Offset for GCUT		0~(63)~127	63		63		66**		63	
18	BCOF	Offset for BCUT		0~(63)~127	63		60		75**		63	
Note: The same CXA2150 service data is used for DX1A-2001&2000.												

DX1A-2001&2000 SERVICE LIST (#3-2): CXA2150P-2 {Picture Controls: P2}											
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)											
Slave Address: 86h											
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)						Comment
0	ALBK	PIC_ON: RGB output including AKB reference pulse on/off (Setting = 0 for power on reset) --- G2 adjustment register setting	C	0, 1	1						C: Common data
1	RGBS	R_ON/G_ON/B_ON: R/G/B outputs on/off (AKB reference pusle can not be turned on/off.) (0,1/0,1/0,1)	C	0~7	7						
2	BLKB	BLK_BT: RGB output bottom limit level (Black Limit) (AKB reference pusle DC-voltage)	C	0~3	3						
3	LIML	PLIMIT_LEV: Threshold level for excessively high inputs (White Limit)	C	0~3	0						
4	PABL	P_ABL: DC-level in RGB output detection for PEAK ABL	C	0~15	15						
5	SABL	S_ABL: S_ABL gain	C	0~3	0						
6	AGNG	AGING_W/AGING_B: AGING_W/AGING_B modes on/off (Set luminance to 80/01IRE flat-field signal.)	C	0~3 (0,1/0,1)	0						
7	AKBO	AKBOFF: Automatic/Manual-Cutoff setting	C	0, 1	0						Video1~4: CVideo1~4 & SVideo1~3
					U/VHF & Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P		
8	SYPH	SYNC_PHASE: Hsync delay with respect to Video (100%: H-period)		0~3	0	0	0	0	0		
9	CLPH	CLP_PHASE: Internal clamp pulse phase (100%: H-period)		0~3	3	3	3	3	3		
10	CLGA	CLP_GATE: Switch for the gated internal clamp pulse with Hsync input		0, 1	0	0	0	0	0		
11	JAXS	JAXIS: Color axis switch		0, 1	0						
12	BLKO	BLKO: Blanking switch		0, 1	0						
Note: The same CXA2150 service data is used for DX1A-2001&2000.											

DX1A-2001&2000 SERVICE LIST (#3-3): CXA2150P-3 {Picture Controls: P3} (Part-1/3)												
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)												
Slave Address: 86h												
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)							Comment	
				Picture Mode: Vivid								
				UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P		
0	<b>SYSM</b>	SYSTEM: Signal bandwidth setting		0~3	1	1	1	1	1	2	2	These settings continue to the next page.  CV: CVideo1~4 SV: SVideo1~3  C: Common data  ( ): Settings at center
1	<b>UVML</b>	VM_LEV: VM_OUT level	C	0~3	3							
2	<b>VMMO</b>	System Micro pin#40		0, 1	0	0	0	0	0	0	0	
3	<b>VMCR</b>	VM_COR: VM_OUT coring level		0~3	3	3	3	3	3	3	3	
4	<b>VMLM</b>	VM_LMT: VM_OUT limit level		0~3	3	3	3	3	3	3	3	
5	<b>VMF0</b>	VM_F0: VM_f0		0~3	2	2	2	2	2	2	2	
6	<b>VMDL</b>	VM_DLY: VM_OUT phase (defined by phase difference from R_OUT)		0~3	3	3	3	3	3	1	3	
7	<b>SHOF</b>	Offset for USHP = SHOF x 4		0~3	2	2	2	3	3	0	2	
8	<b>SHF0</b>	SHP_F0: Sharpness circuit f0		0, 1	1	1	1	1	1	0	1	
9	<b>PROV</b>	PRE/OVER: Y signal pre/over-shoot ratio		0~3	3	3	3	1	3	0	3	
10	<b>F1LV</b>	SHP_F1: Sharpness for higher f0 (4.2/5.6 MHz @ NORMAL mode)		0~3	0	3	3	3	3	3	3	
11	<b>CDSP</b>	SHP_CD: Sharpness in part of high color saturation		0~3	3	3	3	3	3	3	3	
12	<b>LTLV</b>	LTI_LEV: Luminance transient improvement (LTI)		0~3	3	3	3	3	3	3	3	
13	<b>LTMD</b>	LTI_MODE: LTI mode setting		0~3	0	0	0	0	0	0	1	
14	<b>CTLV</b>	CTI_LEV: Chrominance transient improvement (CTI)		0~3	0	0	0	0	0	2	0	
15	<b>CTMD</b>	CTI_MODE: CTI mode setting		0~3	0	0	0	0	0	0	0	
16	<b>UBOF</b>	Offset for UBRT (Picture clarity adjustment)		0~(7)~15	11	11	11	11	11	14	11	
17	<b>UCOF</b>	Offset for UCOL = UCOF x 2 (Picture clarity adjustment)		0~3	3	3	3	3	3	0	3	
18	<b>UHOFF</b>	Offset for UHUE (Picture clarity adjustment)		0~3	2	2	2	2	2	2	2	
19	<b>MIDE</b>	MID enhancement setting		0~15	3	3	3	7	11	---	---	
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.												

DX1A-2001&2000 SERVICE LIST (#3-3): CXA2150P-3 {Picture Controls: P3} (Part-2/3)																							
Register No & Name	Data Initial/Average Settings (32V&36V CRTs)							Data Initial/Average Settings (32V&36V CRTs)							Data Initial/Average Settings (32V&36V CRTs)							Note	
	Picture Mode: Standard							Picture Mode: Movie							Picture Mode: Pro								
	UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF VHF	CV	SV	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P		
#0 SYSM (cont.)	1	1	1	1	1	2	2	1	1	1	1	1	2	2	1	1	1	1	1	2	2	See next page	
#1 UVML (cont.)	3							0							0								
#2 VMMO (cont.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
#3 VMCR (cont.)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
#4 VMLM (cont.)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
#5 VMF0 (cont.)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
#6 VMDL (cont.)	1	3	3	3	3	3	1	3	1	1	1	1	1	3	1	1	1	1	1	3			
#7 SHOF (cont.)	0	3	3	3	3	3	0	2	0	3	3	3	0	3	0	1	1	1	0	1			
#8 SHF0 (cont.)	0	1	1	1	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1			
#9 PROV (cont.)	3	3	3	1	3	0	3	3	3	3	1	3	0	3	3	3	3	1	3	0	3		
#10 F1LV (cont.)	0	3	3	3	3	3	3	3	0	0	0	0	0	3	0	0	0	0	0	3			
#11 CDSP (cont.)	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0			
#12 LTLV (cont.)	2	2	2	2	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
#13 LTMD (cont.)	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	1		
#14 CTLV (cont.)	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
#15 CTMD (cont.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
#16 UBOF (cont.)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
#17 UCOF (cont.)	3	3	3	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
#18 UHOF (cont.)	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
#19 MIDE (cont.)	2	2	2	6	10	---	---	1	1	1	5	9	---	---	0	0	0	4	8	---	---		
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.																							

DX1A-2001&2000 SERVICE LIST (#3-3): CXA2150P-3 {Picture Controls: P3} (Part-3/3)										
Register No & Name	Data Initial/Average Settings (32V&36V CRTs)									
	SNNR=0 (Offset)	SNNR=1 (Offset)	SNNR=2 (Offset)	SNNR=3 (Offset)						
#1 UVML (cont.)	0	0	0	0						
#3 VMCR (cont.)	0	+ 1	+ 2	+ 3						
#10 F1LV (cont.)	0	- 1	- 2	- 3						
#11 CDSP (cont.)	0	0	0	0						
#12 LTLV (cont.)	0	0	0	0						
#14 CTLV (cont.)	0	0	0	0						
#19 MIDE (cont.)	0	0	0	0						
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.										



DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-1/4)												
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)					Slave Address: 86h							
Device Name: CXD2085M { ID-1 Decoder / SONY } / IC3603 (B-board) / P/N: 8-752-395-13 (SD#: S98511B)					Slave Address: 40h							
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)					Comment		
					Vivid 40V	Standard 40V	Movie 40V	Pro	Settings for 36V CRTs are used for initial settings.			
0	UPIC	PICTURE: Picture		0~63	63	50	31	31				
1	UBRT	BRIGHT: Brightness		0~63	22	26	28	31				
2	UCOL	COLOR: Color		0~63	44	35	33	31				
3	UHUE	HUE: Hue		0~63	31	31	31	31	This setting continues to the next page.			
		SNNR Setting-related Controls for USHP										
4	USHP	SHARPNESS: Sharpness		0~63	42	48	34	31				
5	UTMP	Color Temperature (0: Warm, 1: Neutral, 2: Cool)		0~2	2	1	0	1				
6	UDCL	DCOL: Dynamic color setting		0~3	2	2	2	2	These settings continue to the next page.  Video1~4: CVideo1~4 & SVideo1~3			
					Picture Mode: Vivid / Standard / Movie							
					UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i		P&P		
7	AXIS	COL_AXIS: Color matrix setting		0~3	3	3	3	3				
					Picture Mode: Vivid					These settings continue to the next page.		
					UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P			
8	UGAM	GAMMA/GAMMA_L: RGB output GAMMA correction setting (B <sub>7~6</sub> ) GAMMA L: Slight GAMMA correction on/off (B <sub>0</sub> )		0~7 (0~3/0,1)	7	7	7	7	7			
9	AGAM	GAMMA/GAMMA_L (Av Pro user control) --- Void Data		0~7 (0~3/0,1)	---							
		UGAM Setting-related Controls for GSBO, GCOO, GHUO			UGAM = 7	UGAM = 6	UGAM = 5	UGAM = 4	UGAM = 3	UGAM = 2	UGAM = 1	These settings continue to the next page.
10	GSBO	Offset for SBRT (8 types of GSBO data based on UGAM values)		0~3	0	0	0	0	0	0		
11	GCOO	Offset for UCOL		0~3	0	0	0	0	0	0		
12	GHUO	Offset for UHUE		0~3	0	0	0	0	0	0		
					Picture Mode: Vivid					These settings continue to the next page. ( ): Settings at center		
					UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P			
13	UBLK	Item # 15~18 pack FI data controls		0~7	7	7	7	7	7			
14	ABLK	(Av Pro user control) --- Void Data	---	0~7	0 (Void data)							
		UBLK Setting-related Controls for DCTR									These settings continue to the next page. ( ): Settings at center	
15	DCTR	DC_TRAN: Y signal DC transmission (8 types of DCTR data based on UBLK values)		0~3	3	3	3	3	2			
16	DPIC	DPIC_LEV: Y signal AUTO PEDESTAL level		0~3	2	2	2	2	1			
17	DSBO	Offset for SBRT		0~(7)~15	7	7	7	7	7			
18	ABLM	ABL_MODE: ABL mode		0~3	1	1	1	1	1			
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.												

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-2/4)																
Register No & Name	Data Initial/Average Settings (32V&36V CRTs)					Data Initial/Average Settings (32V&36V CRTs)					Data Initial/Average Settings (32V&36V CRTs)					Note
SNNR Setting (-Offset)	SNNR = 0	SNNR = 1	SNNR = 2	SNNR = 3												
#4 USHP (cont.)	0	1	3	4												
	Picture Mode: Pro															
	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P											
#7 AXIS (Cont.)	3	3	3	3	3											
	Picture Mode: Standard					Picture Mode: Movie					Picture Mode: Pro					
	U/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	U/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	U/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
#8 UGAM (Cont.)	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	
	UGAM = 0															
#10 GSBO (cont.)	0															
#11 GCOO (cont.)	0															
#12 GHUO (cont.)	0															
	Picture Mode: Standard					Picture Mode: Movie					Picture Mode: Pro					
	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i	P&P	
#13 UBLK (Cont.)	4	4	4	4	4	1	1	1	1	1	0	0	0	0	0	
#15 DCTR (Cont.)	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	
#16 DPIC (Cont.)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	
#17 DSBO (Cont.)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
#18 ABLM (Cont.)	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.																

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-3/4)									
Register No & Name	Data Initial/Average Settings (32V&36V CRTs)								Comment
	UBLK = 7	UBLK = 6	UBLK = 5	UBLK = 4	UBLK = 3	UBLK = 2	UBLK = 1	UBLK = 0	
#15 DCTR (Cont.)	3	2	2	2	1	1	1	1	
#16 DPIC (Cont.)	2	3	2	1	3	2	1	0	
#17 DSBO (Cont.)	7	7	7	7	7	7	7	7	
#18 ABLM (Cont.)	1	0	0	1	0	0	0	0	
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.									

DX1A-2001&2000 SERVICE LIST (#3-4): CXA2150P-4 {Picture Controls: P4} (Part-4/4)									
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)				Comment	
19 <b>ABLT</b>	ABL_TH: ABL correct detection Vth control		0~15	0				Full: 480p/960i (4x3) Vcomp1: 480p/960i (16x9) Vcomp2: 1080i (16x9) (:): Settings at center C: Common data	
				Full	Vcomp1	Vcomp2			
20 <b>ABLC</b>	Control of CXA2026 {0Ch -- DAC0} (*)		0~255	0		66			
21 <b>EPOF</b>	Offset for UPIC = EPOF x (UPIC/63) (for power save) --- Void Data	---	0~31						
	ID-1 and P&P Modes								
22 <b>SPOF</b>	Offset for UPIC = SPOF x (UPIC/64) --- Data Not Used	---	0~31	0 (Not used)					
				UHF/VHF Video1~4	YPbPr 480i	YPbPr 480p	YPbPr 1080i		P&P
23 <b>SCON</b>	SUB_CONTRAST: SUB PICTURE		0~15	8	8	6	4		8
24 <b>CLOF</b>	Offset for UCOL		0~(7)~15	8	10	9	7		8
25 <b>HUOF</b>	Offset for UHUE		0~7~15	4	3	3	3		4
	CXD2085 Service Controls								
26 <b>IDSW</b>	Switch for activating the selection in #27 DATA	C	0, 1	0					
				Full	Vcomp1	Vcomp2			
27 <b>DATA</b>	Selection of geometry-forced vertical compression modes	C	0~3	0	1	2			
<b>Note:</b> The same CXA2150 service data are used for DX1A-2001&2000.									

DX1A-2001&2000 SERVICE LIST (#4-1): CXA2150D-1 {Deflection Controls: D1}								
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)								
Slave Address: 86h								
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)			Comment
					Full	Vcomp1	Vcomp2	Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display
0	VPOS	V_POSITION: Vertical position (V_DRV signal DC-bias)	Adj.	0~(31)~63	26 [26]			
1	VSIZ	V_SIZE: Vertical size (V_DRV signal gain)	Adj.	0~(31)~63	19 [19]			
2	VLIN	V_LINEARITY: Vertical linearity (Gain for V_DRV signal secondary component)	Adj.	0~(7)~15	9 [9]			Adj.: Adjusted data ( ): Settings at center
3	VSCO	S_CORRECTION: Vertical S-correction	Adj.	0~(7)~15	8 [8]			
4	VCEN	VSAW0_DCH/VSAW0_DCL: Vertical center adjustment VSAW0_DCH: VSAW0 waveform DC component (high 2-bits) VSAW0_DCL: VSAW0 waveform DC component (low 4-bits)	Adj.	0~(31)~63	31 [31]			VCEN-L(Low bit) VCEN-H(High bit)
5	VPIN	VSAW0_AMP: Vertical PIN adjustment VSAW0 waveform SAW component amplitude	Adj.	0~(15)~31	15 [15]	15 [Copy1]		[Copy1]: Copy the adjusted data for Full mode.
6	NSCO	VSAW1_DC: Rotation	Adj.	0~(7)~15	7 [7]			Either 7 or 8 can be used as the average NSCO data. (If both of them are not good, please feedback to / check with the DY attachment process.)
7	HTPZ	VSAW1_AMP: Horizontal trapezoid	Adj.	0~(15)~31	15 [15]			
8	ZOOM	ZOOM_SW: Zoom switch		0, 1	0	0		
9	APSW	ASP_SW: Aspect switch		0, 1	1	1	0	
10	ASPT	V_ASPECT: Aspect ratio	Adj.	0~63	47	47	47	
11	SCRL	V_SCROLL: Vertical scroll	Adj.	0~(31)~63	31	32	32	
12	UVLN	UP_VLIN: Upper vertical linearity		0~15	0	0		
13	LVLN	LO_VLIN: Lower vertical linearity		0~15	0	0		
Note: The same CXA2150 service data is used for DX1A-2001&2000.								

DX1A-2001&2000 SERVICE LIST (#4-2): CXA2150D-2 {Deflection Controls: D2}							
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)							
Slave Address: 86h							
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)			Comment
				Full	Vcomp1	Vcomp2	
0	HCNT HC_PARA_DC: Horizontal center	Adj.	0~(31)~63	31	[31]		Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display  ( ): Settings at center  Adj.: Adjusted data [Adj.-6steps]: The adj. data for Vcomp2 mode = The adj. data for Full/Vcomp1 modes - 6 steps
1	HPOS H_POSITION: Horizontal position	Adj.	0~(31)~63	31		31	
				[31]		[Adj.-6steps]	
2	HSIZ H_SIZE: Horizontal size	Adj.	0~(31)~63	45	[45]		Data (32Vor36V): The data for 36V are used as the Initial & CBA data.  From the system micro (V 2.0), the deflection control-related initial settings are the same as their average data.
3	SLIN MP_PARA_DC: Horizontal S-correction	Adj.	0~15	3	[3]		
4	MPIN MP_PARA_AMP: Horizontal middle pin		0~15	7			
5	PIN PIN_AMP: Horizontal pin	Adj.	0~(31)~63	35	[35]		
6	UCP UP_CPIN: Upper corner pin	Adj.	0~(31)~63	38	[38]		
7	LCP LO_CPIN: Lower corner pin	Adj.	0~(31)~63	42	[42]		
8	UXCG UP_UCG: Upper extra corner pin gain		0~3	0			
9	LXCG LO_UCG: Lower extra corner pin gain		0~3	0			
10	UXCP UP_UCP: Upper extra corner pin position		0~3	2			
11	LXCP LO_UCP: Lower extra corner pin position		0~3	2			
12	XCPP UC_POL: Extra corner pin polarity		0, 1	0			
13	PPHA PIN_PHASE: Pin phase	Adj.	0~(31)~63	15	[15]		
14	VANG AFC_ANGLE: AFC angle	Adj.	0~(31)~63	31	[31]		
15	LANG HC_PARA_PHASE: Linearity angle	Adj.	0~(31)~63	31	[31]		
16	VBOW AFC_BOW: AFC bow	Adj.	0~(31)~63	31	[31]		
17	LBOW HC_PARA_AMP: Linearity bow	Adj.	0~(31)~63	31	[31]		
18	CPY1 Copy Function 1: (Set CPY1=1, then press MUTE + Enter.) Copy all CXA2150D-2 data for Full mode to Vcomp1&2	Micro	0, 1	0			For engineering design use only
Note: The same CXA2150 service data is used for DX1A-2001&2000.							

DX1A-2001&2000 SERVICE LIST (#4-3): CXA2150D-3 {Deflection Controls: D3}							
Device Name: CXA2150AQ { CRT Driver / SONY } / IC201 (A-board) / P/N: 8-752-093-35 (SBorSD#: NA)							
Slave Address: 86h							
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)			Comment
				Full	Vcomp1	Vcomp2	Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display
0	HBLK HBLK_SW: Horizontal blanking switch		0, 1	1			
1	LBLK LEFT_BLK: Left blanking		0~63	43	50		
2	RBLK RIGHT_BLK: Right blanking		0~63	29	27		
3	VLK VBLK_SW: Vertical blanking switch		0, 1	1	1		
4	TBLK UP_BLK: Top blanking		0~(7)~15	3	8	12	( ): Settings at center
5	BBLK LO_BLK: Bottom blanking		0~(7)~15	8	13	13	
6	VCMP V_COMP: Vertical compensation		0~15	0	0	0	
7	HCMP H_COMP: Horizontal compensation		0~15	0	0		
8	ACMP AFC_COMP: AFC compensation		0~7	0	0		
9	PCMP PIN_COMP: Pin compensation		0~7	0	0		
10	AFCM AFC_MODE: AFC loop gain		0~3	3	2		
11	VFRQ V_FREQ: Vertical frequency		0~3	1			
12	VON V_ON: Vertical drive on		0, 1	1			
13	JUMP JMP_SW: Reference pulse jump switch		0, 1	0	1		
14	VDJP VDRV_SW: Vertical drive jump switch		0, 1	0	0	1	
15	VDST RST_SW: Vertical drive start switch		0, 1	0	0	1	
16	EWDC EW_DC: Pin DC level shift		0, 1	0	0		
17	AKBT AKBTIM: AKB timing		0~31	20	20	10	
<b>Note:</b> The same CXA2150 service data is used for DX1A-2001&2000.							

DX1A-2001&2000 SERVICE LIST (#5): CXA2151Q									
Device Name: CXA2151Q { Component I/F & Sync Separation / SONY } / IC3001 (B-board) / P/N: 8-752-093-84 (SD#: S00302B)									
Slave Address: 84h									
Register No & Name		Control Register Function & Link		Data Type	Data Range	Data Initial/Average Settings (32V&36V CRTs)			Comment
						480i (15.75 KHz)	480p (31.50 KHz)	1080i (33.75 KHz)	Video5&6: YPbPr-480i/480p/1080i inputs Sub: 480i input from the sub-channel  Full: 480p/960i (4x3) display Vcomp1: 480p/960i (16x9) display Vcomp2: 1080i (16x9) display  C: Common data
0	MTRX	MAT_OUT: Selection of color matrix conversion types		Micro	0~3	0	0	1	
1	GAIN	GAIN_SEL: Selection of output signals for SELYOUT, SELCBOUT, SELCROUT		C	0~3	0			
2	CBGN	YGAIN, CBGAIN, CRGAIN: The gain control of SELYOUT, SELCBOUT, & SELCROUT		C	0~15	9			
3	VTC	V_TC: Setting of Vsync separation time constant		C	0~3	1			
4	HWID	H_WIDTH: Setting of the output pulsewidth of SELHOUT		C	0~3	1			
						Video5	Video6	Sub	
5	HSEP	HSEP_SEL: Setting for the sync separation system			0, 1	0	0	0	
6	TEST	TEST: Test mode selection (for device tests)		C	0, 1	0			
7	FRGB	The forced RGB selection (for tests) {0: MAT_OUT = MTRX (#0), 1: MAT_OUT = MTRX (#3)}		C	0, 1	0			
						Full	Vcomp1	Vcomp2	
8	HMSK	Hsync masking in vertical retrace			0, 1	1		0	
Note: The same CXA2151 service data is used for DX1A-2001&2000.									

DX1A-2001&2000 SERVICE LIST (#6): D-CONV / CXA8070									
Device Name: CXA8070AP { DY-Convergence Control / SONY } / IC5513 (D-board) / P/N: 8-759-595-52 (SB#: V1718)									
Slave Address: DEh									
Register No & Name		Control Register Function & Link		Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)			Comment
						Full	Vcomp1	Vcomp2	<div>Full: 480p/960i (4x3) display mode</div> <div>Vcomp1: 480p/960i (16x9) display mode</div> <div>Vcomp2: 1080i (16x9) display mode</div> <div>Adj.: Adjusted data</div> <div>From the system micro (V 2.0), the deflection control-related initial settings are the same as their average data.</div>
0	SBHS	DC AMP3: DC shift	Adj.	0~63	31 [31]	31 [31]	31 [31]		
1	YBWU	VCA9: Upper Y-bow	Adj.	0~63	31 [31]	31 [31]	31 [31]		
2	YBWL	VCA10: Lower Y-bow	Adj.	0~63	31 [31]	31 [31]	31 [31]		
3	RSAP	DC AMP2: Right H-AMP	Adj.	0~63	31 [31]	31 [31]	31 [31]		
4	RUBW	VCA5: Right upper bow	Adj.	0~63	31 [31]	31 [31]	31 [31]		
5	RLBW	VCA6: Right lower bow	Adj.	0~63	31 [31]	31 [31]	31 [31]		
6	LSAP	DC AMP1: Left H-AMP	Adj.	0~63	31 [31]	31 [31]	31 [31]		
7	LUBW	VCA1: Left upper bow	Adj.	0~63	31 [31]	31 [31]	31 [31]		
8	LLBW	VCA2: Left lower bow	Adj.	0~63	31 [31]	31 [31]	31 [31]		
9	CADJ	DC AMP4: Offset adjustment (ADJ)	Adj.	0~63	48 [48]				For engineering design use only
10	CPY2	Copy Function 2: (Set CPY2=1, then press MUTE + Enter.)	Micro	0, 1	0				
<div>Note:</div> <div>The same CXA8070 service data is used for DX1A-2001&amp;2000.</div>									



DX1A-2001&2000 SERVICE LIST (#7): CXA2026AS							
Device Name: CXA2026AS { DQP Control / SONY } / IC5511 (D-board) / P/N: 8-752-074-64 (SD#: S95610B)							
Slave Address: 8Eh							
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial Settings & [Average Data] (32V&36V CRTs)			Comment
0	<b>DFON</b> SW0: DF on/off switch	C	0, 1	Full	Vcomp1	Vcomp2	Full: 480p/960i (4x3) display mode Vcomp1: 480p/960i (16x9) display mode Vcomp2: 1080i (16x9) display mode C: Common data Adj.: Adjusted data
1	<b>DQP</b> PWM: DQP phase	Adj.	0~63	0			
2	<b>DF</b> DAC1: DF phase	Adj.	0~63	23 [23]	23 [23]		
3	<b>DQPD</b> H.AMP: DQP dc-level	Adj.	0~63	25 [25]	25 [25]		
4	<b>QPDV</b> U.CBOW, L.CBOW: DQP dc-level vertical modulation		0~63	34 [12]	34 [12]		
5	<b>DVS</b> U.CBOW, L.CBOW: DQP dc-level tilt		0~(3)~7	35	31		
6	<b>QPDY</b> U.MBH,L.MBH: DQP dc-level at top & bottom areas		0~63	0	0		U.CBOW = QPDV + DVS L.CBOW = QPDV - DVS
7	<b>DQPA</b> DC SHIFT: DQP amplitude	Adj.	0~63	15	15		( ): Settings at center
8	<b>QPAV</b> U.YBOW, LYBOW: DQP amplitude vertical modulation		0~63	13 [10]	13 [10]	13 [10]	Data (36v) is used as Initial/CBA data. From the system micro (V 2.0), most deflection control-related initial settings are the same as their average data.
9	<b>AVS</b> U.YBOW, LYBOW: DQP amplitude tilt		0~7	38	34		
10	<b>NORM</b> SW1:		0, 1	3	3		
11	<b>CPY3</b> Copy Function 3: (Set CPY3=1, then press MUTE + Enter.)	Micro	0, 1	0	0		U.YBOW = QPAV + AVS L.YBOW = QPAV - AVS
12	<b>200V</b> H.DUTY, H.TILT: 200V regulator adjustment	Adj.	0~63	0	0		For engineering design use only
Note: The same CXA2026 service data is used for DX1A-2001&2000.							

DX1A-2001&2000 SERVICE LIST (#8): Audio Processing (AP) / BH3868AFS					
Device Name: BH3868AFS { Audio Processor / ROHM } / IC7001 (A-board) / P/N: 8-759-678-92 (SBorSD#: NA)					
Slave Address: 82h					
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	<b>SVOL</b> Volume: Offset for Volume		0~3	0	
1	<b>SBAL</b> Balance: Offset for Balance		0~(3)~7	7	( ): Settings at center
2	<b>SBAS</b> Bass: Offset for Bass		0~(3)~7	10	
3	<b>STRE</b> Treble: Offset for Treble		0~(3)~7	3	
4	<b>BBLP</b> BBE lowpass filter		0~15	6	
5	<b>BBHP</b> BBE highpass filter		0~15	7	
6	<b>SREF</b> Surround effect		0~7	11	
7	<b>AGC</b> Auto gain control		0, 1	0	
8	<b>BBE</b> BBE on/off		0, 1	1	
Note: The same AP service data is used for DX1A-2001&2000.					

DX1A-2001&2000 SERVICE LIST (#9): TruSurround (TRUS) / NJM2180					
Device Name: NJM2180M { TruSurround 3D-Audio Processor / JRC } / IC4101 (S-board) / P/N: 8-759-686-15 (SB#: V9072)					
Device Control: Controlled via CXA1315M (Audio Control D/A, IC4103/S-board, Slave Address: 48h) / P/N: 8-752-059-23 (SD#: S88Z45B)					
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	<b>TS</b> TruSurround effect selection		0~3	2	C: Common data
1	<b>DMY1</b> Dummy data (No functions)	C	0~255	0	DMY1 is used to fulfil the minimum requirement of 2 control items in each service control category.
Note: The same TRUS service data is used for DX1A-2001&2000.					

DX1A-2001* SERVICE LIST (#10): MID1 (Common Data)									
Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)									
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }									
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, MID-XA Software: Version 12/08/00, (P/N: 6-800-050-01)									
Register No & Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V/36V/40V CRTs)			Comment
						MID Mode: All (Single & P&P & Favorite)			
0	DHPH	Horizontal phase of the active display area	d_h_phase	C	0~255	91			C: Common data
1	DVPH	Vertical phase of the active display area	d_v_phase	C	0~63	20			
2	DHAR	Horizontal size of the active display area	d_h_area	C	0~255	240			
3	DVAR	Vertical size of the active display area	d_v_area	C	0~255	135			
4	DHPW	Horizontal pulse width	d_h_pwidth	C	0~63	27			
5	DVPW	Vertical pulse width	d_v_pwidth	C	0~7	7			
6	DYCD	Delay of YC signal output	d_yc_delay	C	0~63	2			
7	DYSD	Delay of YS signal output	d_ys_delay	C	0~7	1			
						MID Mode: Signle & Favorite			
						Single 480i&p	Single 1080i	Favorite	
8	MDHP	Horizontal position of the main picture	m_dsp_hpos		0~255	33		12	
9	MDVP	Vertical position of the main picture	m_dsp_vpos		0~255	32	8	14	
10	MDHS	Horizontal size of the main picture	m_dsp_hsiz		0~255	230		158	
11	MDVS	Vertical size of the main picture	m_dsp_vsiz		0~255	120	135	106	
						MID Mode: P&P & Favorite			
12	MLHP	(Horizontal position of the multi pictures)			0~255	54			
13	MLVP	(Vertical position of the multi pictures)			0~255	31			
						MID Mode: Favorite			
14	SDHP	Horizontal position of the sub picture	s_dsp_hpos		0~255	172			
15	SDVP	Vertical position of the sub picture	s_dsp_vpos		0~255	14			
16	SDHS	Horizontal size of the sub picture	s_dsp_hsiz		0~255	61			
17	SDVS	Vertical size of the sub picture	s_dsp_vsiz		0~255	41			
						MID Mode: All (Single & P&P & Favorite)			
18	DPSW	Switch of display output PLL	dsp_pll_sw	C	0, 1	0			0: MUST be used in DX1A-2001, 1: Used in DX1A-2000
19	MDL0	Model selection 0 (0: 16x9, 1: 4x3)		C	0, 1	0			
Note:									
* These MID1 settings are used for DX1A-2001 ONLY. The DPSW setting was changed from 1 in DX1A-2000 to 0 in DX1A-2001.									

DX1A-2001&2000 SERVICE LIST (#11): MID2 (DRC-in Data)												
Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)												
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }												
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, MID-XA Software: Version 12/08/00, (P/N: 6-800-050-01)												
Register No & Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)						
						MID Mode: Single		MID Mode: P&P & Favorite			MID Mode: Freeze	
						YC 480i	YPbPr 480i	YC 480i	YPbPr 480i	YC 480i-(R)	YC 480i	YPbPr 480i
0	DRHP	Horizontal position of the active display area (DRC-in)	drc_hactv_pos		0~255	120	116	131	129	137	138	136
1	DRHS	Hsize of the active display area (DRC-in)	drc_hactv_siz		0~255	174	174	167	167	168	165	165
2	DRV	Vposition of the active display area (DRC-in)	drc_vactv_pos		0~63	38	38	53	53	53	53	53
3	DRVS	Vertical size of the active display area (DRC-in)	drc_vactv_siz		0~255	120	120	112	112	112	112	112
Note: The same MID2 service data is used for DX1A-2001&2000.												

DX1A-2001&2000 SERVICE LIST (#12): MID3 (VDO-in Data) (Part-1/2)										
Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)										
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }										
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, MID-XA Software: Version 12/08/00, (P/N: 6-800-050-01)										
Register No & Name		Control Register Function & Link	Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Comment
						MID Mode: Single				Dummy-480i settings are used for No Signal cases.  These settings continue to the next page.
							YPbPr 480P		Dummy 480i	
0	VDHP	Horizontal position of the active display area (VDO-in)	vdo_hactv_pos		0~255		122		179	
1	VDHS	Horizontal pixel size of the active display area (VDO-in)	vdo_hactv_pos		0~255		159		199	
2	VDVE	Vertical even position of the active display area (VDO-in)	vdo_vactv_evn		0~63		39		24	
3	VDVS	Vertical line size of the active display area (VDO-in)	vdo_vactv_pos		0~255		129		56	
						YC 480i	YPbPr 480P	YPbPr 1080i	Dummy 480i	
4	VDVO	Vertical odd position of the active display area (VDO-in)	vdo_vactv_odd		0~3	0	0	0	0	
5	VCPO	Clamp pulse output timing (VDO-in)	vdo_clp_pos		0~255	95	70	40	90	
6	VCWD	Clamp pulse width (VDO-in)	vdo_clp_wdt		0~7	3	3	3	3	
7	VYCD	Analog input YC delay (VDO-in)	vdo_yc_delay		0~63	0	0	0	0	
							YPbPr 480P	YPbPr 1080i		
8	VSTP	PD stop line count of external PLL (VDO-in)	vdo_pll_stop		0~255		119	160		
9	VSTT	PD start line count of external PLL (VDO-in)	vdo_pll_strt		0~15		7	0		
						MID Mode: All (Single & P&P & Favorite)				
10	VHSC	Horizontal sync cycle (VDO-in)	vdo_hsync_cyc		0~255	130				
Note: The same MID3 service data is used for DX1A-2001&2000.										

DX1A-2001&2000 SERVICE LIST (#12): MID3 (VDO-in Data) (Part-2/2)								
Register No & Name	Data Initial Setting (32V&36V CRTs)				Data Initial Setting (32V&36V CRTs)			Comment
	MID Mode: P&P / Favorite				MID Mode: FREEZE			
	YC 480i	YPbPr 480P	YPbPr 1080i	Dummy 480i	YPbPr 480P	YPbPr 1080i	Dummy 480i	Dummy-480i settings are used for No Signal cases.
#0 VDHP (cont.)	197	127	91	179	131	98	179	
#1 VDHS (cont.)	219	154	151	199	153	149	199	
#2 VDVE (cont.)	24	53	37	24	53	37	24	
#3 VDVS (cont.)	56	112	126	56	112	126	56	
Note: The same MID3 service data is used for DX1A-2001&2000.								

DX1A-2001&2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-1/4)															
Device Name: CXD9509AQ { MID-XA / Fujitsu & SONY } / IC3408 (B-board) / P/N: 8-759-672-57 (SBorSD#: NA)															
Slave Address: 2Eh { Controlled through MID-XA Micro (IC3090/B-board, Slave Address: 64h) / P/N: 6-800-050-01 (SB#: V4216) }															
MID-XA Micro (MASK type): MB94918RPF-G-137-BND, MID-XA Software: Version 12/08/00, (P/N: 6-800-050-01)															
Register No & Name		Control Register Function & Link		Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				
		Settings for P&P (Main)					UHF/VHF & CVideo				YPbPr-480i (DVD)				See the next page.
							Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
0	POP	Selection of service data tables (Table #: 0~15)				0~15	0	1	2	3	4	5	6	7	
1	MHLY	Y coefficient code of Horizontal LPF (M)			m_hlpf_ycoef	0~3	1	1	1	1	1	1	1	1	
2	MHLC	C coefficient code of Horizontal LPF (M)			m_hlpf_ccoef	0~3	3	3	3	3	3	3	3	3	
3	MVLY	Y coefficient code of Vertical LPF (M)			m_vlpf_ycoef	0~3	0	0	0	0	0	0	0	0	
4	MVLC	C coefficient code of Vertical LPF (M)			m_vlpf_ccoef	0~3	0	0	0	0	0	0	0	0	
5	MHYR	Y coreing code of horizontal enhancement (M)			m_henh_ycore	0~3	0	0	0	0	0	0	0	0	
6	MHYL	Y clipping code of horizontal enhancement (M)			m_henh_yclip	0~3	1	1	1	1	1	1	1	1	
7	MHYE	Y level code of horizontal enhancement (M)			m_henh_yenh	0~7	4	0	0	0	3	0	0	0	
8	MHYO	Y coefficient code of horizontal enhancement (M)			m_henh_ycof	0, 1	1	1	1	1	1	1	1	1	
9	MHCR	C coreing code of horizontal enhancement (M)			m_henh_ccore	0~3	0	0	0	0	0	0	0	0	
10	MHCL	C clipping code of horizontal enhancement (M)			m_henh_cclip	0~3	1	1	1	1	1	1	1	1	
11	MHCE	C level code of horizontal enhancement (M)			m_henh_cenh	0~7	0	0	0	0	0	0	0	0	
12	MHCO	C coefficient code of horizontal enhancement (M)			m_henh_ccof	0, 1	1	1	1	1	1	1	1	1	
13	MVYR	Y coreing code of vertical enhancement (M)			m_venh_ycore	0~3	0	0	0	0	0	0	2	2	
14	MVYL	Y clipping code of vertical enhancement (M)			m_venh_yclip	0~3	1	1	1	1	1	1	1	1	
15	MVYE	Y level code of vertical enhancement (M)			m_venh_yenh	0~7	0	0	0	0	0	0	2	5	
16	MVCR	C coreing code of vertical enhancement (M)			m_venh_ccore	0~3	0	0	0	0	0	0	0	0	
17	MVCL	C clipping code of vertical enhancement (M)			m_venh_cclip	0~3	1	1	1	1	1	1	1	1	
18	MVCE	C level code of vertical enhancement (M)			m_venh_cenh	0~7	0	0	0	0	0	0	0	0	
Note: The same MID5 service data is used for DX1A-2001&2000.															

See the next page.

## DX1A-2001&amp;2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-2/4)

Register No & Name	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Comment			
	YPbPr-480p				YPbPr-1080i							
	Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid				
#0 POP (cont.)	8	9	10	11	12	13	14	15				
#1 MHLY (cont.)	1	1	1	1	1	1	1	1				
#2 MHLC (cont.)	3	3	3	3	3	3	3	3				
#3 MVLY (cont.)	0	0	0	0	0	0	0	0				
#4 MVLC (cont.)	0	0	0	0	0	0	0	0				
#5 MHYR (cont.)	0	0	0	0	0	0	0	0				
#6 MHYL (cont.)	1	1	1	1	1	1	1	1				
#7 MHYE (cont.)	4	0	0	0	4	0	0	0				
#8 MHYO (cont.)	1	1	1	1	1	1	1	1				
#9 MHCR (cont.)	0	0	0	0	0	0	0	0				
#10 MHCL (cont.)	1	1	1	1	1	1	1	1				
#11 MHCE (cont.)	0	0	0	0	0	0	0	0				
#12 MHCO (cont.)	1	1	1	1	1	1	1	1				
#13 MVYR (cont.)	0	0	2	2	0	0	0	0				
#14 MVYL (cont.)	1	1	1	1	1	1	1	1				
#15 MVYE (cont.)	0	0	2	5	0	0	0	0				
#16 MVCR (cont.)	0	0	0	0	0	0	0	0				
#17 MVCL (cont.)	1	1	1	1	1	1	1	1				
#18 MVCE (cont.)	0	0	0	0	0	0	0	0				
<b>Note:</b> The same MID5 service data are used for DX1A-2001&2000.												

## DX1A-2001&amp;2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-3/4)

Register No.&Name		Control Register Function & Link		Register Name (Software)	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				
		Settings for P&P (Sub)					UHF/VHF & CV				YPbPr-480i (DVD)				See the next page.
							Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
0	POP	Selection of service data tables (Table #: 0~15)				0~15	0	1	2	3	4	5	6	7	
19	SHLY	Y coefficient code of Horizontal LPF (S)			s_hlpf_ycoef	0~7	0	0	0	0	0	0	0	0	
20	SHLC	C coefficient code of Horizontal LPF (S)			s_hlpf_ccoef	0~7	0	0	0	0	0	0	0	0	
21	SVLY	Y coefficient code of Vertical LPF (S)			s_vlpf_ycoef	0~7	0	0	0	0	0	0	0	0	
22	SVLC	C coefficient code of Vertical LPF (S)			s_vlpf_ccoef	0~7	0	0	0	0	0	0	0	0	
23	SHYR	Y coreing code of horizontal enhancement (S)			s_henh_ycore	0~3	0	0	0	0	0	0	0	0	
24	SHYL	Y clipping code of horizontal enhancement (S)			s_henh_yclip	0~3	0	0	0	0	0	0	0	0	
25	SHYE	Y level code of horizontal enhancement (S)			s_henh_yenh	0~7	0	0	0	0	0	0	0	0	
26	SHYO	Y coefficient code of horizontal enhancement (S)			s_henh_ycof	0, 1	0	0	0	0	0	0	0	0	
27	SHCR	C coreing code of horizontal enhancement (S)			s_henh_ccore	0~3	0	0	0	0	0	0	0	0	
28	SHCL	C clipping code of horizontal enhancement (S)			s_henh_cclip	0~3	0	0	0	0	0	0	0	0	
29	SHCE	C level code of horizontal enhancement (S)			s_henh_cenh	0~7	0	0	0	0	0	0	0	0	
30	SHCO	C coefficient code of horizontal enhancement (S)			s_henh_ccof	0, 1	0	0	0	0	0	0	0	0	
31	SVYR	Y coreing code of vertical enhancement (S)			s_venh_ycore	0~3	0	0	0	0	0	0	0	0	
32	SVYL	Y clipping code of vertical enhancement (S)			s_venh_yclip	0~3	0	0	0	0	0	0	0	0	
33	SVYE	Y level code of vertical enhancement (S)			s_venh_yenh	0~7	0	0	0	0	0	0	0	0	
34	SVCR	C coreing code of vertical enhancement (S)			s_venh_ccore	0~3	0	0	0	0	0	0	0	0	
35	SVCL	C clipping code of vertical enhancement (S)			s_venh_cclip	0~3	0	0	0	0	0	0	0	0	
36	SVCE	C level code of vertical enhancement (S)			s_venh_cenh	0~7	0	0	0	0	0	0	0	0	
Note: The same MID5 service data is used for DX1A-2001&2000.															



DX1A-2001&2000 SERVICE LIST (#13): MID5 (Picture Data: MIDE) (Part-4/4)									
Register No.&Name	Data Initial/Average Setting (32V&36V CRTs)				Data Initial/Average Setting (32V&36V CRTs)				Comment
	YPbPr-480p				YPbPr-1080i				
	Pro	Movie	Standard	Vivid	Pro	Movie	Standard	Vivid	
#0 POP (cont.)	8	9	10	11	12	13	14	15	
#19 SHLY (cont.)	0	0	0	0	0	0	0	0	
#20 SHLC (cont.)	0	0	0	0	0	0	0	0	
#21 SVLY (cont.)	0	0	0	0	0	0	0	0	
#22 SVLC (cont.)	0	0	0	0	0	0	0	0	
#23 SHYR (cont.)	0	0	0	0	0	0	0	0	
#24 SHYL (cont.)	0	0	0	0	0	0	0	0	
#25 SHYE (cont.)	0	0	0	0	0	0	0	0	
#26 SHYO (cont.)	0	0	0	0	0	0	0	0	
#27 SHCR (cont.)	0	0	0	0	0	0	0	0	
#28 SHCL (cont.)	0	0	0	0	0	0	0	0	
#29 SHCE (cont.)	0	0	0	0	0	0	0	0	
#30 SHCO (cont.)	0	0	0	0	0	0	0	0	
#31 SVYR (cont.)	0	0	0	0	0	0	0	0	
#32 SVYL (cont.)	0	0	0	0	0	0	0	0	
#33 SVYE (cont.)	0	0	0	0	0	0	0	0	
#34 SVCR (cont.)	0	0	0	0	0	0	0	0	
#35 SVCL (cont.)	0	0	0	0	0	0	0	0	
#36 SVCE (cont.)	0	0	0	0	0	0	0	0	
<b>Note:</b> The same MID5 service data are used for DX1A-2001&2000.									

DX1A-2001* SERVICE LIST (#14): On-Screen Display (OSD)						
Device Name: M306V2ME-153FP (V1.0) { System Micro (MASK type) / Mitsubishi } / IC701 (A-board)						
Slave Address: 60h						
System Micro (MASK type): M306V2ME-153FP, Sys-Software: Version 1.0, P/N: 6-800-051-01 (SB#: V9091)						
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	HPOS	OSD horizontal position	C	0~255	23	C: Common data
1	HPOF	Horizontal position for Favorite mode	C	0~255	33	
2	VPOS	OSD vertical position	C	0~255	5	
3	VPOT	Vertical position for P&P (Twin) mode	C	0~255	32	
<b>Note:</b> * This OSD settings are used for DX1A-2001 ONLY. (DX1A-2000 uses two OSD settings based on two versions of system micros.)						

DX1A-2001&2000 SERVICE LIST (#15): SNNR									
<b>Related Control Devices:</b> mPD64082 { 3D-Comb / NEC } / IC3501 (BC-board) / Slave Address: B8h CXA2103Q { Chroma Decoder / SONY } / IC3048 (B-board) / Slave Address: 9Ah (Main) CXA2150Q { CRT Driver / SONY } / IC201 (A-board) / Slave Address: 86h									
Register No & Name	Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting 32V&36V CRTs				Comment	
0	<b>SNNR</b> SNNR data setting		0~3	0					
1	<b>SNFX</b> Selection of SNNR data settings; 0: Set SNNR automatically according to WSLT value (read data)	C	0, 1	0				C: ComMon data	
2	<b>WSLT</b> Noise level detection data thresholds for SNNR data (read data)		0~255	WSLT Data / Threthold Range					
	SNNR data used as the (-) offset settings			0~30	31~62	63~126	127~255		
	SNNR = 0/1/2/3 @ WSLT £ 0/31/63/127, respectively		0~3	SNNR Settings Based on WSL Data ( - Offset Data)					
3	<b>CPFG</b> Related to 3D-COMB (mPD64082) / #19 <b>YPFG</b> settings		-----	0	1	2	3		
4	<b>CPFT</b> Related to 3D-COMB (mPD64082) / #18 <b>YPFT</b> settings		-----	0	0	0	0		
	SNNR data used as the direct settings		-----						
5	<b>CCOR</b> Related to 3D-COMB (mPD64082) / #20 <b>YHCO</b> settings		-----	0	1	1	1		
6	<b>CHCG</b> Related to 3D-COMB (mPD64082) / #21 <b>YHCG</b> settings		-----	1	1	1	1		
	SNNR data used as the (-) offset settings								
7	<b>CAPG</b> Related to 3D-COMB (mPD64082) / #16 <b>VAPG</b> settings		-----	0	0	0	0		
8	<b>3SHP</b> Related to CXA2103 / #6 <b>SHAP</b> settings		-----	0	1	2	3		
9	<b>MIDD</b> Related to CXA2150P-3 / #19 <b>MIDE</b> settings		-----	0	1	2	3		
10	<b>5SHP</b> Related to CXA2150P-4 / #4 <b>USHP</b> settings		-----	0	1	3	4		
11	<b>5YF1</b> Related to CXA2150P-3 / #10 <b>F1LV</b> settings		-----	0	1	2	3		
12	<b>5CDS</b> Related to CXA2150P-3 / #11 <b>CDSP</b> settings		-----	0	0	0	0		
13	<b>5LTI</b> Related to CXA2150P-3 / #12 <b>LTLV</b> settings		-----	0	0	0	0		
14	<b>5CTI</b> Related to CXA2150P-3 / #14 <b>CTLV</b> settings		-----	0	0	0	0		
15	<b>5VML</b> Related to CXA2150P-3 / #1 <b>UVML</b> settings		-----	0	0	0	0		
	SNNR data used as the (+) offset settings			SNNR Settings Based on WSL Data ( + Offset Data)					
16	<b>5VMC</b> Related to CXA2150P-3 / #3 <b>VMCR</b> settings		-----	0	+ 1	+ 2	+ 3		
<b>Note:</b> The same SNNR service data is used for DX1A-2001&2000. Please refer to the part numbers and SBoSD numbers given in the service list for these devices.									

DX1A-2001&2000 SERVICE LIST (#16): ID-1 Detection (ID1)						
Device Name: CXD2085M { ID-1 Decoder / SONY } / IC3603 (B-board) / P/N: 8-752-395-13 (SD#: S98511B)						
Slave Address: 40h						
Register No & Name		Control Register Function & Link	Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	XJGL	XJGLK: Setting for memorizing or not the ID-1 detection status when the VTR in Fast Forward (FF) or Rewind (REW) mode	C	0, 1	0	C: Common data
1	LNJI	LNJ1: Setting for the multi/single-line ID-1 detection	C	0, 1	0	
<b>Note:</b> The same ID1 service data is used for DX1A-2001&2000. Other service controls related to CXD2085 (IDSW & DATA) are listed in Service List (CXA2150P-4) for easier engineering adjustment.						

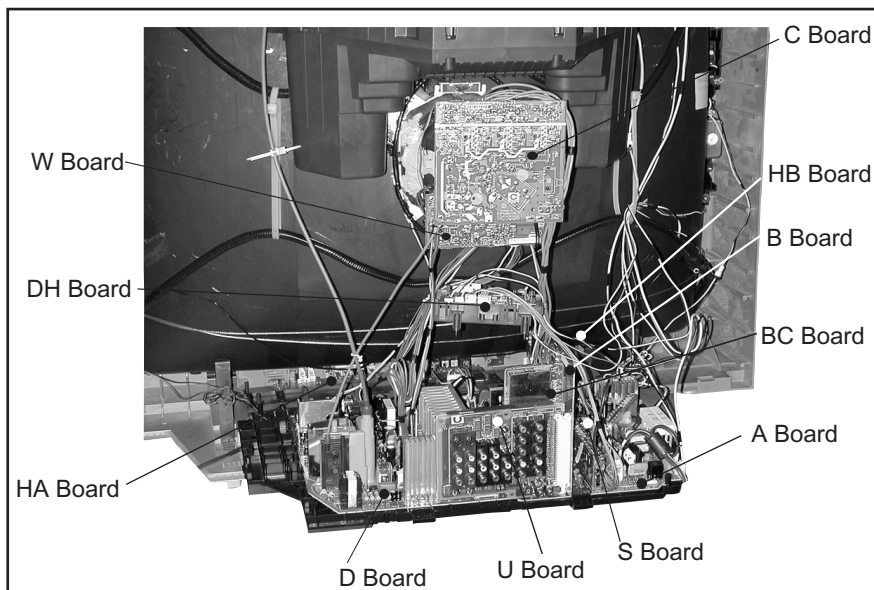
DX1A-2001&2000 SERVICE LIST (#17): Closed Caption Display & Parental Control (CCD&VCHIP)						
Device Name: CXP85840A-039Q { CCD&Vchip Micro (MASK type) / SONY } / IC3602 (Main) & IC3601 (Sub) (B-board) / P/N: 8-752-916-40 (SD#: S97739B)						
Slave Address: 68h (Main) & 6Ch (Sub)						
CCD&Vchip Micro Software: Version 2.14						
Register No & Name	Control Register Function & Link		Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	HPRM	Horizontal position of CCD (Main)	C	0~255	46	C: Common data
1	HPRS	Horizontal position of CCD (Sub)	C	0~255	46	
2	RND	OSD rounding control	C	0, 1	1	
3	CCDI	Interuption control	C	0~7	3	
4	CRIP	CRI count & parity count	C	0~7	4	
5	CRIT	Charge/Discharge timing control for slice voltage level	C	0, 1	0	0: MASK-type micro, 1: OTP-type micro
6	CHMK	Horizontal mask width	C	0~63	42	
7	FPOL	Field polarity selection	C	0, 1	1	
8	LANG		C	0~3	0	
9	DATA	Switch for CCD service/test data	C	0, 1	0	
10	VCHIP	Selection of Vchip controls	C	0, 1	0	
<b>Note:</b> The same CCD&VCHIP service data is used for DX1A-2001&2000.						

DX1A-2001&2000 SERVICE LIST (#18): OPTIONS (OP)						
Device Name: M306V2ME-153FP (V1.0) { System Micro (MASK type) / Mitsubishi } / IC701 (A-board)						
Slave Address: 60h						
System Micro (MASK type): M306V2ME-153FP, Sys-Software: Version 1.0, P/N: 6-800-051-01 (SB#: V9091)						
Register No & Name	Control Register Function & Link		Data Type	Data Range	Data Initial/Average Setting (32V&36V CRTs)	Comment
0	DLY1	AC-RLY to MAIN-RLY timing = DLY1 x 50 ms	C	0~15	4	C: Common data
1	DLY2	Power-On Mute timing = DLY2 x 50 ms	C	0~31	12	
2	DLY3	DGC-RLY to MAIN-RLY timing = DLY3 x 50 ms	C	0~15	7	
3	RAMW	RAM monitor on/off	C	0, 1	0	
<b>Note:</b> The same OP service data is used for DX1A-2001&2000.						


DX1A-2001* SERVICE LIST (#19): IDENTIFICATION (ID)						
Device Name: M306V2ME-153FP (V1.0) { System Micro (MASK type) / Mitsubishi } / IC701 (A-board)						
Slave Address: 60h						
System Micro (MASK type): M306V2ME-153FP, Sys-Software: Version 1.0, P/N: 6-800-051-01 (SB#: V9091)						
Register No & Name	Control Register Function & Link		Data Type	Data Range		Comment
		Shipping Destination-related Settings			KV-38DRC2 KV-38DRC2C	
0	ID0	Selection of OSD languages & color systems		0~255	25	
1	ID1	Selection of composite & s-video inputs		0~255	127	
2	ID2	Selection of audio-related controls		0~255	255	
3	ID3	Selection of basic system settings		0~255	202	
4	ID4	Selection of basic system settings		0~255	251	
5	ID5	Selection of advanced system settings		0~255	177	
6	ID6	Selection of sub picture-related settings		0~255	54	
7	ID7	Selection of some reserved settings		0~255	88	
<b>Note:</b> * These ID settings are used for DX1A-2001 ONLY. (DX1A-2000 uses different ID settings.) The system micro name, software&patch versions, and the status of NVM devices are displayed only when in this service category (#19): ID.						



## SECTION 5: DIAGRAMS

### 5-1. CIRCUIT BOARDS LOCATION



Circled numbers are waveform references.

The components identified by  in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used (Refer to Safety Related Adjustments on page 18).

When replacing components identified by , make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by  and repeat the adjustment until the specified value is achieved.

When replacing the parts listed in the table below, it is important to perform the related adjustments.

### 5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF :  $\mu\text{F}$  50VV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K = 1000, M = 1000K.

Indication of resistance, which does not have one for rating electrical power, is as follows:

Pitch : 5mm


Rating electrical power :

$\frac{1}{4}$  W,  $\frac{1}{2}$  W in resistance,  $\frac{1}{10}$  W and  $\frac{1}{8}$  W in chip resistance.

 : nonflammable resistor.

 : fusible resistor.

 : internal component.

 : panel designation and adjustment for repair.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.


All voltages are in V.


S : Measurement impossibility.


--- : B+line.


---  : B-line. (Actual measured value may be different).



 : signal path. (RF)

The components identified by shading and  symbol are critical for safety. Replace only with part number specified.

The symbol  indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.


Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole  indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

Part Replaced (  )	Adjustment (  )
<b>D BOARD:</b> IC6503, IC8001, IC8003, IC8004, D8004, D8014, R8016, R8021, R8028, R8041, R8042, R8044, R8072, R8073, R8074, R8077, R8078, R8080, R8081, R8082, R8091, R8095	<b>D BOARD:</b> RV8001, RV8002

### REFERENCE INFORMATION

#### RESISTOR

: RN METAL FILM  
 : RC SOLID  
 : FPRD NONFLAMMABLE CARBON  
 : FUSE NONFLAMMABLE FUSIBLE  
 : RW NONFLAMMABLE WIREWOUND  
 : RS NONFLAMMABLE METAL OXIDE  
 : RB NONFLAMMABLE CEMENT  
 :  ADJUSTMENT RESISTOR

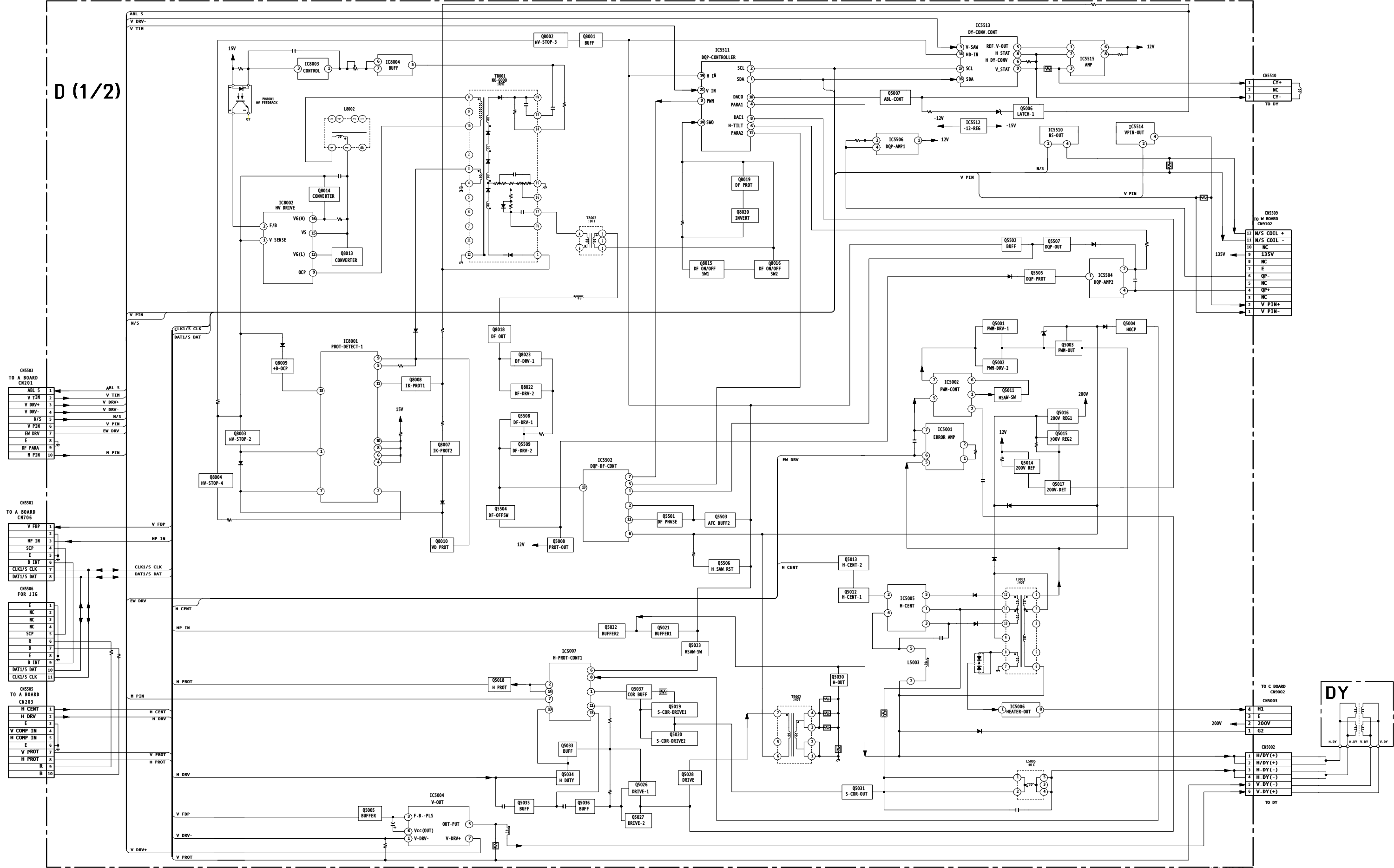
#### CAPACITOR

: TA TANTALUM  
 : PS STYROL  
 : PP POLYPROPYLENE  
 : PT MYLAR  
 : MPS METALIZED POLYESTER  
 : MPP METALIZED POLYPROPYLENE  
 : ALB BIPOLAR  
 : ALT HIGH TEMPERATURE  
 : ALR HIGH RIPPLE

#### COIL

: LF-8L MICRO INDUCTOR

BLOCK DIAGRAM (1 OF 5)





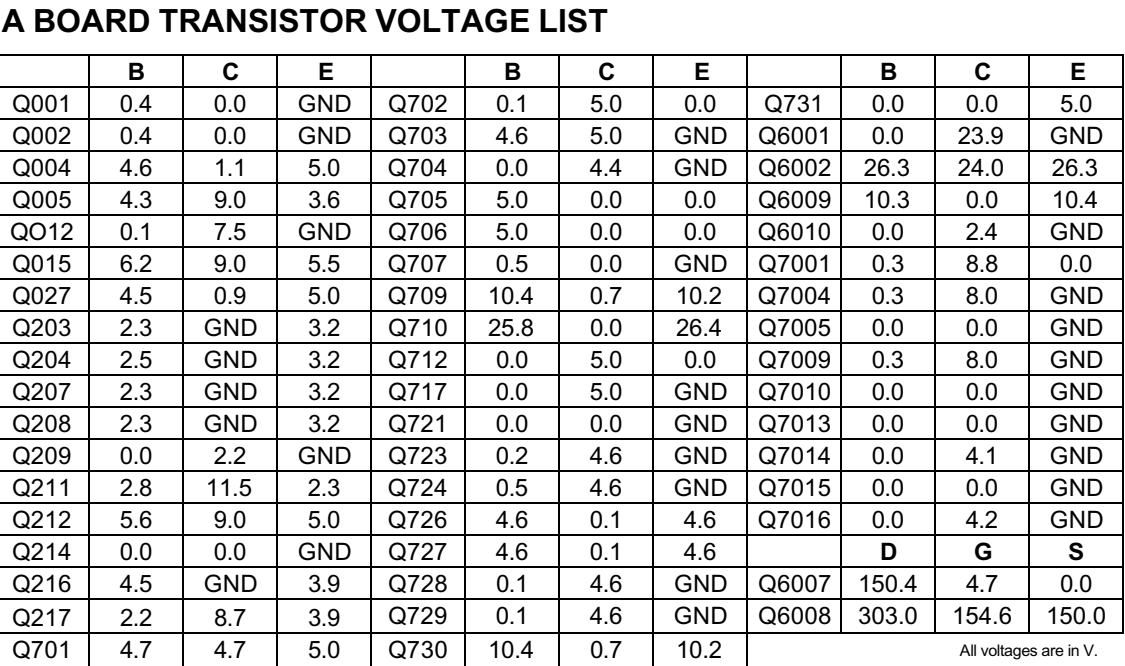




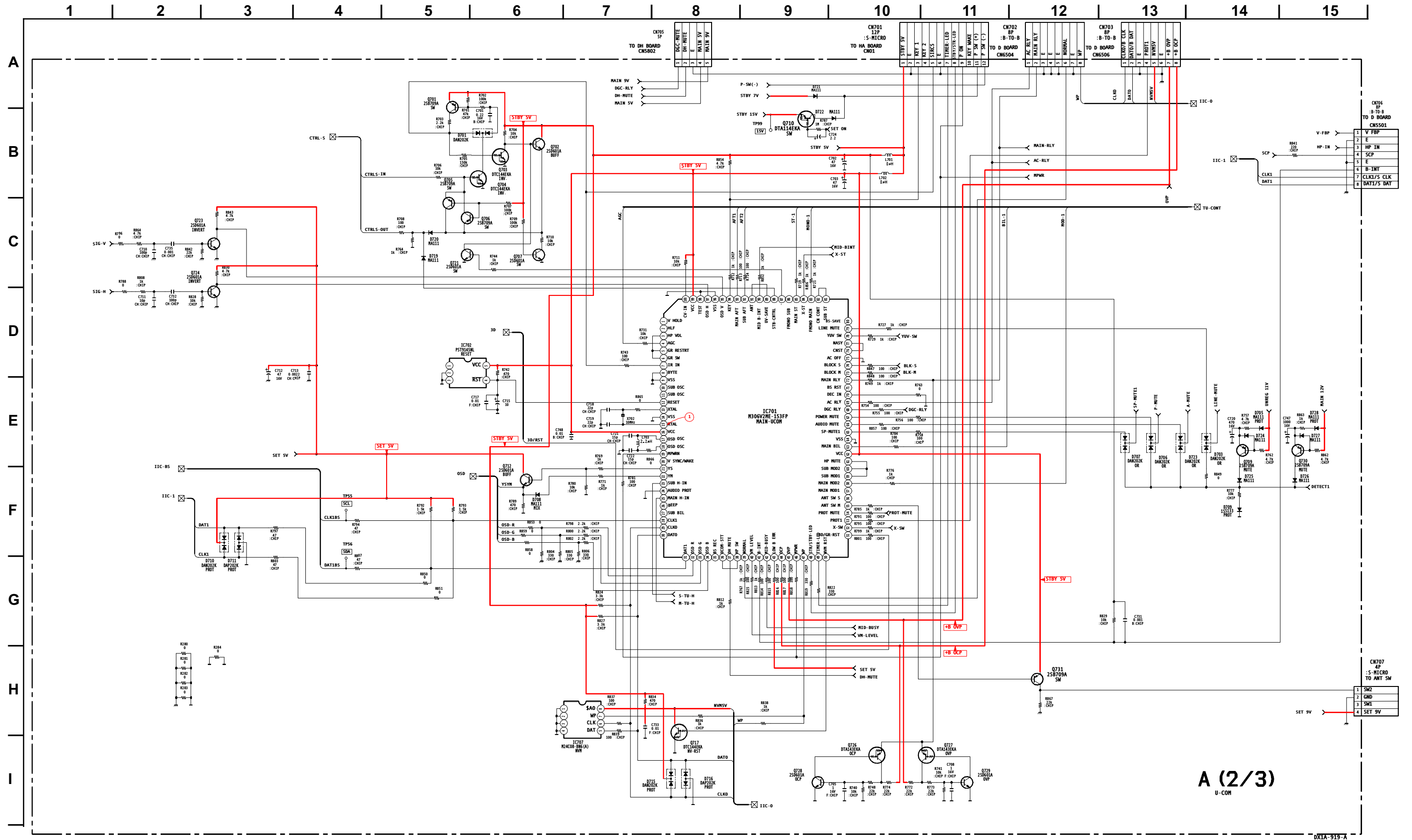






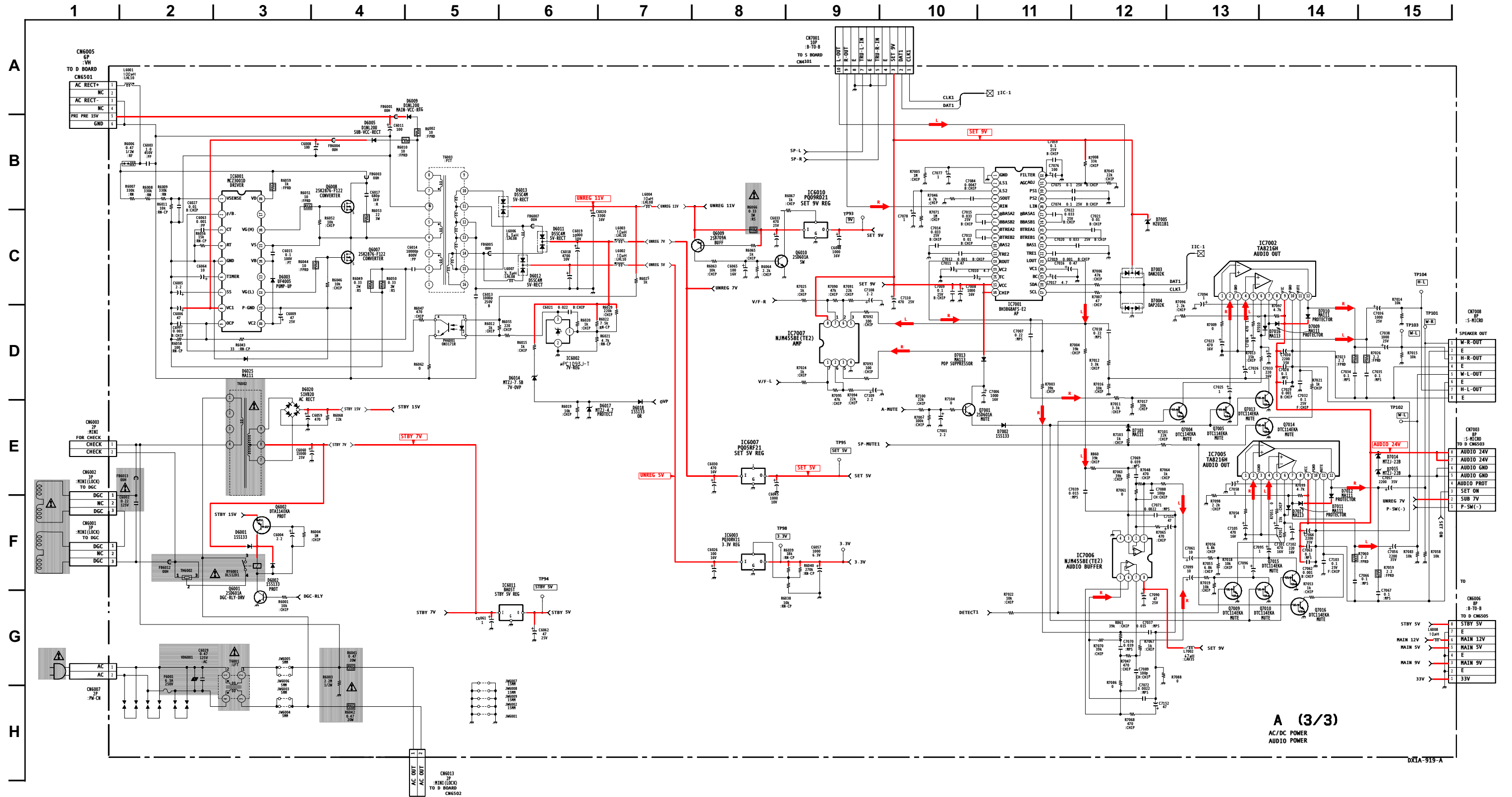


## A BOARD SCHEMATIC DIAGRAM (2 OF 3)





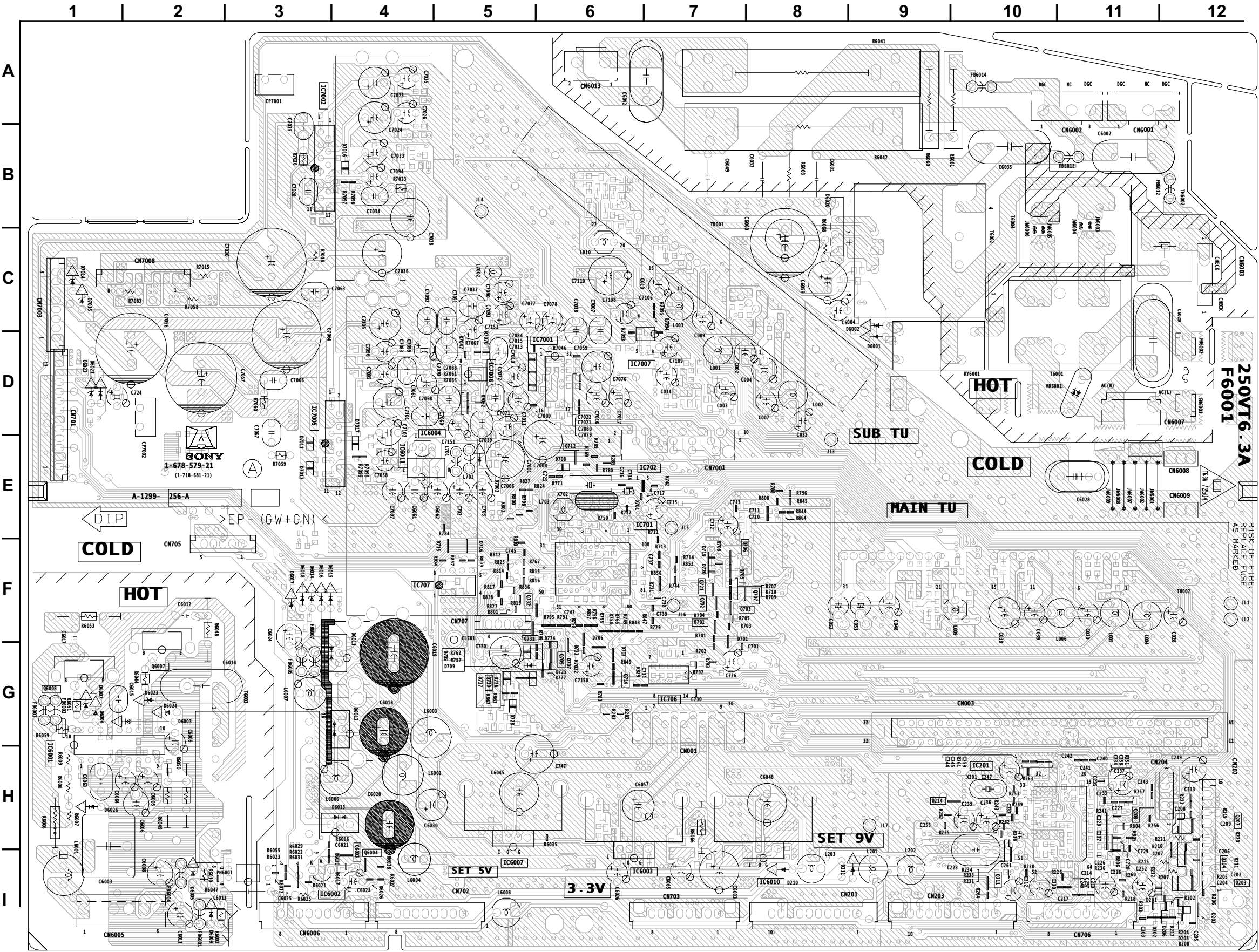
### A BOARD SCHEMATIC DIAGRAM (3 OF 3)





**A** [TUNER, CRT DRIVE, U-COM, AC/DC POWER, AUDIO POWER]

COMPONENT SIDE



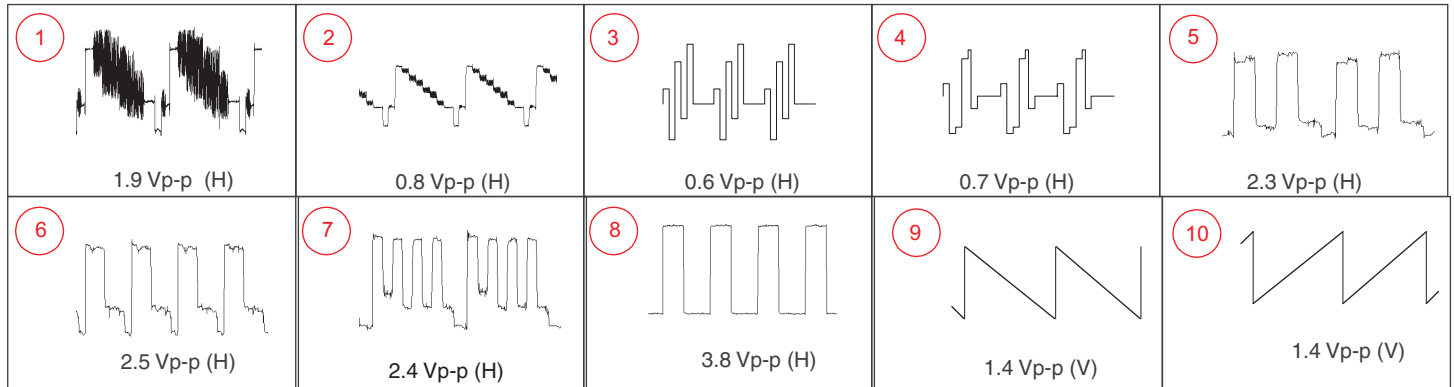
A BOARD LOCATOR LIST  
(COMPONENT SIDE)

DIODE		IC		CRYSTAL	
D203	I-12	IC201	H-10	X201	H-10
D211	I-8	IC701	E-6	X702	E-6
D212	H-8	IC702	E-6		
D701	D-4	IC707	F-4		
D703	F-6	IC6001	G-1		
D705	F-4	IC6002	I-4		
D706	F-6	IC6003	I-7		
D707	G-6	IC6007	H-5		
D708	E-6	IC6010	I-8		
D709	G-5	IC6011	E-4		
D715	E-4	IC7001	D-6		
D716	E-5	IC7002	A-3		
D719	F-7	IC7005	D-3		
D720	F-7	IC7006	D-5		
D723	F-6	IC7007	D-6		
D724	F-5	TRANSISTOR			
D725	G-6	Q203	I-12		
D726	G-5	Q204	I-12		
D727	G-5	Q207	H-12		
D728	G-5	Q208	H-11		
D6001	C-9	Q211	I-10		
D6002	C-8	Q214	H-9		
D6003	G-2	Q701	F-7		
D6005	I-2	Q702	F-7		
D6009	I-2	Q703	F-7		
D6011	F-4	Q705	F-7		
D6012	G-4	Q706	F-7		
D6013	H-4	Q707	F-7		
D6014	F-3	Q709	G-6		
D6017	F-3	Q712	D-6		
D7002	E-5	Q730	G-5		
D7011	D-3	Q731	F-5		
D7012	E-3	Q6007	G-2		
D7014	C-1	Q6008	G-1		
D7015	C-1				
D7016	B-4				
D7017	D-4				



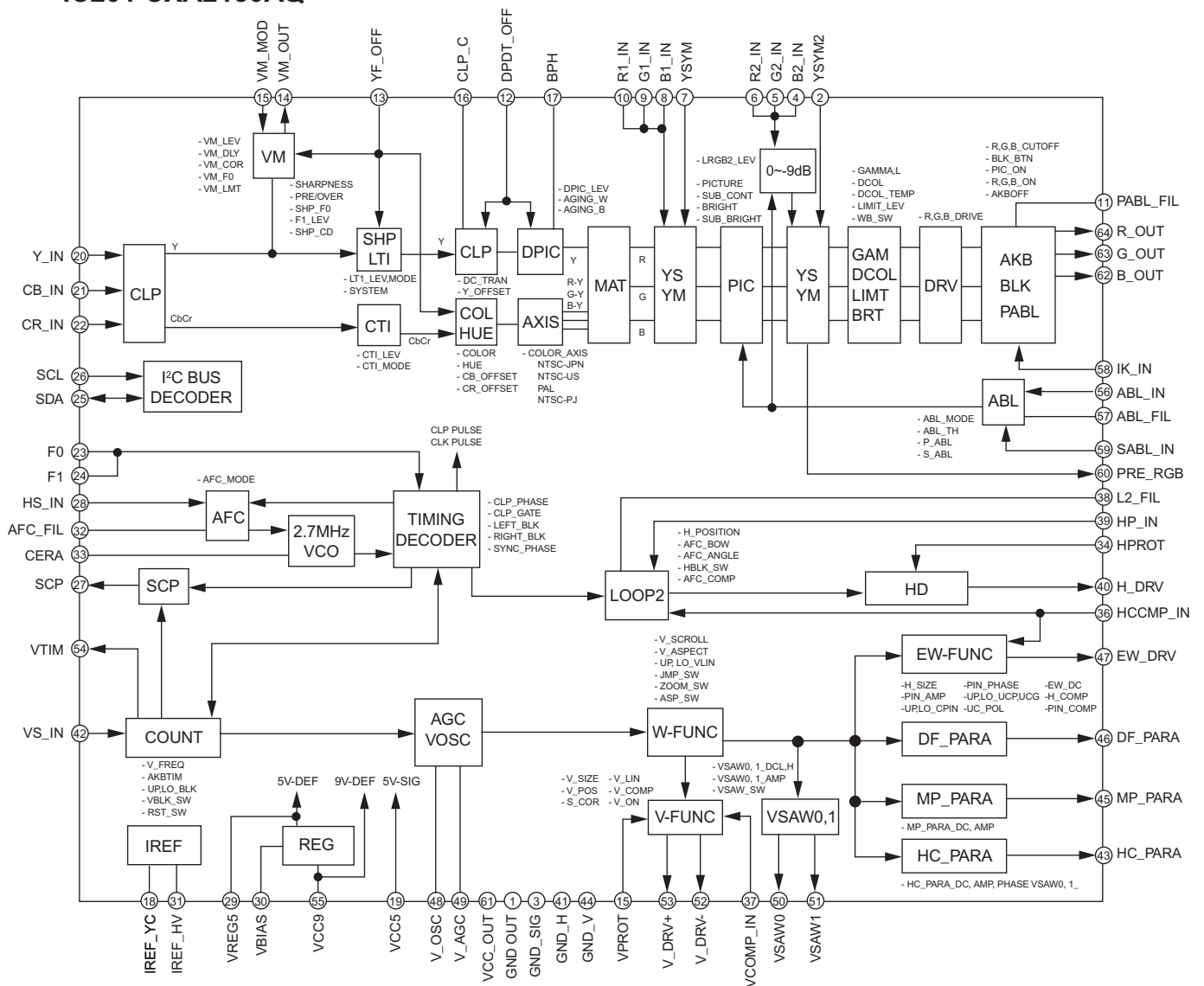
DIODE		Q209	B-11
D004	F-7	Q212	B-10
D008	F-7	Q216	A-10
D214	B-10	Q217	A-11
D215	B-10	Q704	D-8
D710	D-7	Q710	F-1
D711	D-7	Q717	D-5
D721	F-1	Q723	D-7
D722	F-1	Q724	E-7
D6018	D-3	Q726	C-5
D6025	D-3	Q727	C-5
D7003	E-5	Q728	C-6
D7004	E-5	Q729	C-5
D7005	E-5	Q6001	G-9
D7009	H-4	Q6002	G-10
D7010	H-4	Q6009	B-7
D7013	F-5	Q6010	A-7
D7103	E-4	Q7001	E-5
TRANSISTOR		Q7004	H-4
Q001	F-7	Q7005	I-4
Q002	F-7	Q7009	F-4
Q004	D-9	Q7010	F-4
Q005	H-6	Q7013	H-4
Q012	D-10	Q7014	H-4
Q015	D-10	Q7015	F-4
Q027	H-6	Q7016	E-4

## A BOARD WAVEFORMS



## A BOARD IC BLOCK DIAGRAM

### IC201 CXA2150AQ



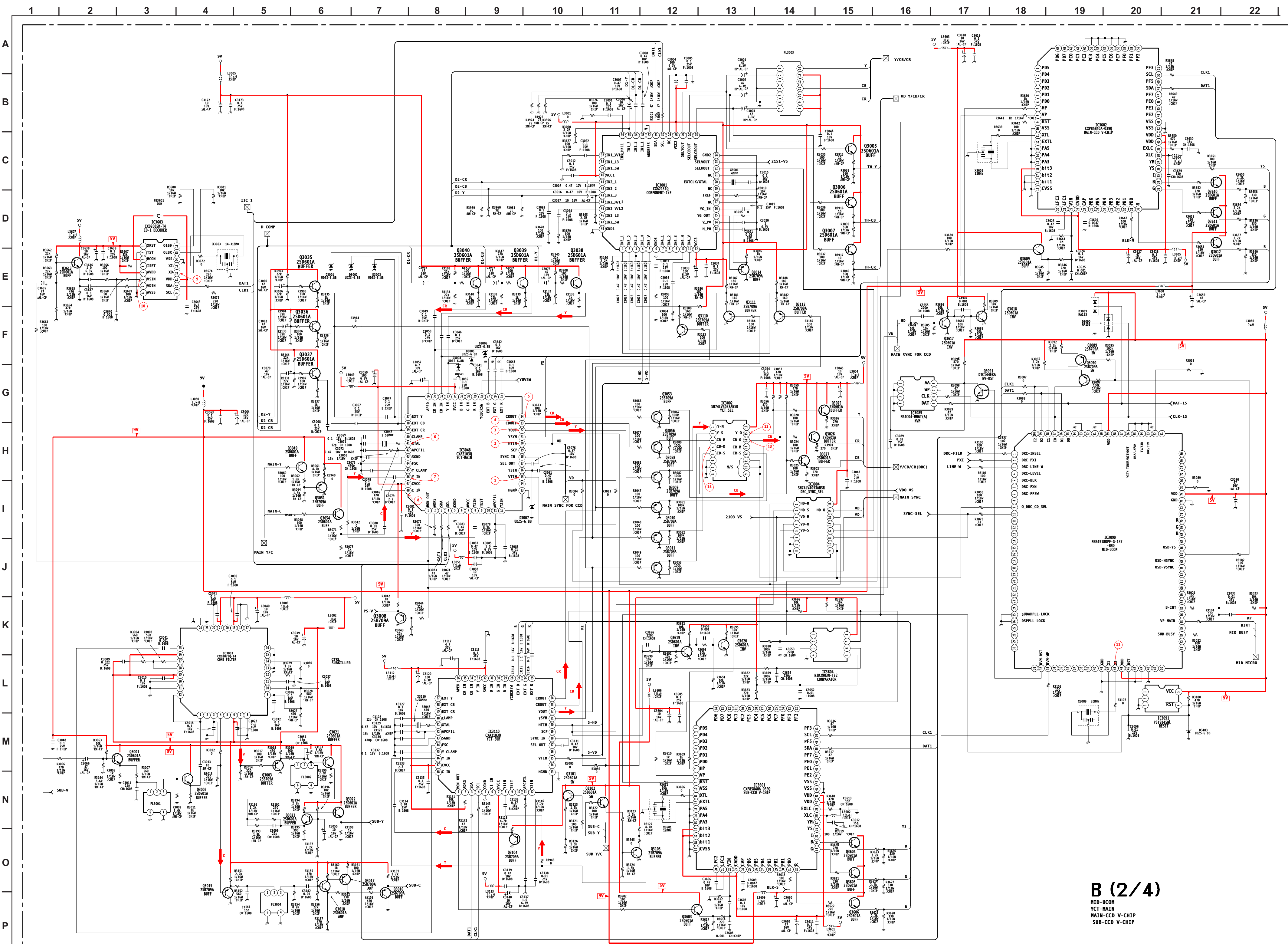


## A BOARD IC VOLTAGE LIST

IC201		47	3.9	29	4.9	77	0.0	6	0.0	9	4.4	9	23.7
PIN	VOLT	48	4.4	30	4.9	78	0.0	7	4.6	10	4.4	10	0.0
1	GND	49	5.4	31	4.4	79	0.0	8	17.3	11	4.4	11	4.2
2	0.0	50	3.5	32	0.0	80	N/C	9	0.0	12	4.4	12	10.5
3	GND	51	3.8	33	0.0	81	0.0	10	10.4	13	0.8	IC7006	
4	3.1	52	3.4	34	0.0	82	0.0	11	GND	14	1.9	PIN	VOLT
5	3.1	53	3.5	35	N/C	83	0.0	12	4.7	15	9.0	1	4.5
6	3.1	54	1.0	36	0.0	84	0.0	13	N/C	16	9.0	2	4.5
7	0.0	55	9.0	37	4.6	85	0.0	14	160.6	17	4.5	3	4.5
8	3.6	56	1.0	38	0.0	86	N/C	15	150.4	18	4.6	4	GND
9	3.6	57	4.3	39	0.0	87	0.0	16	154.6	19	1.9	5	4.5
10	3.6	58	3.9	40	0.0	88	0.0	17	N/C	20	0.8	6	4.5
11	0.0	59	1.7	41	2.3	89	0.0	18	303.1	21	4.4	7	4.5
12	0.5	60	1.7	42	0.0	90	0.0	IC6002		22	4.4	8	9.0
13	0.5	61	9.0	43	4.6	91	0.0	PIN	VOLT	23	4.4	IC7007	
14	2.3	62	2.3	44	2.8	92	0.0	1	7.3	24	4.4	PIN	VOLT
15	3.7	63	2.5	45	0.1	93	0.0	2	GND	25	4.4	1	4.5
16	2.7	64	2.3	46	0.0	94	4.6	3	2.5	26	4.4	2	4.5
17	2.6	IC701		47	4.6	95	4.6	IC6003		27	4.4	3	4.1
18	1.1	PIN	VOLT	48	5.0	96	GND	PIN	VOLT	28	4.4	4	GND
19	4.9	1	N/C	49	5.0	97	4.6	I	5.7	29	4.4	5	4.5
20	3.6	2	N/C	50	0.0	98	GND	G	GND	30	4.5	6	4.5
21	3.4	3	0.0	51	5.0	99	4.9	O	3.3	31	2.8	7	4.5
22	3.4	4	0.0	52	0.0	100	4.6	IC6007		32	4.4	8	9.0
23	GND	5	0.0	53	3.0	IC702		PIN	VOLT	IC7002		All voltages are in V.	
24	N/C	6	0.0	54	0.0	PIN	VOLT	I	6.3	PIN	VOLT		
25	4.6	7	4.7	55	0.0	1	N/C	G	GND	1	1.6		
26	4.6	8	GND	56	N/C	2	GND	O	5.0	2	0.0		
27	0.7	9	GND	57	N/C	3	GND	IC6010		3	GND		
28	0.0	10	N/C	58	0.0	4	4.9	PIN	VOLT	4	0.0		
29	5.0	11	N/C	59	0.0	5	4.9	I	10.9	5	1.6		
30	5.6	12	4.9	60	0.0	IC707		G	GND	6	8.0		
31	1.3	13	2.3	61	0.0	PIN	VOLT	O	9.0	7	11.0		
32	3.0	14	GND	62	4.9	1	GND	IC6011		8	5.0		
33	1.6	15	2.4	63	4.9	2	GND	PIN	VOLT	9	23.7		
34	0.0	16	4.9	64	GND	3	GND	I	7.0	10	0.0		
35	0.0	17	0.0	65	0.0	4	GND	G	GND	11	4.1		
36	0.2	18	0.0	66	N/C	5	4.6	O	5.0	12	10.5		
37	0.0	19	0.0	67	0.0	6	4.6	IC7001		IC7005			
38	3.2	20	N/C	68	0.0	7	5.0	PIN	VOLT	PIN	VOLT		
39	1.1	21	0.0	69	7.3	8	5.0	1	GND	1	1.6		
40	2.8	22	0.0	70	0.0	IC6001		2	0.0	2	0.0		
41	GND	23	0.0	71	N/C	PIN	VOLT	3	4.5	3	GND		
42	0.0	24	GND	72	6.3	1	-159.4	4	4.4	4	0.0		
43	3.8	25	0.0	73	0.0	2	1.8	5	4.4	5	1.6		
44	GND	26	N/C	74	0.0	3	-150.0	6	4.4	6	8.0		
45	2.8	27	N/C	75	GND	4	2.5	7	4.4	7	11.0		
46	3.6	28	4.4	76	0.0	5	GND	8	4.4	8	5.0		

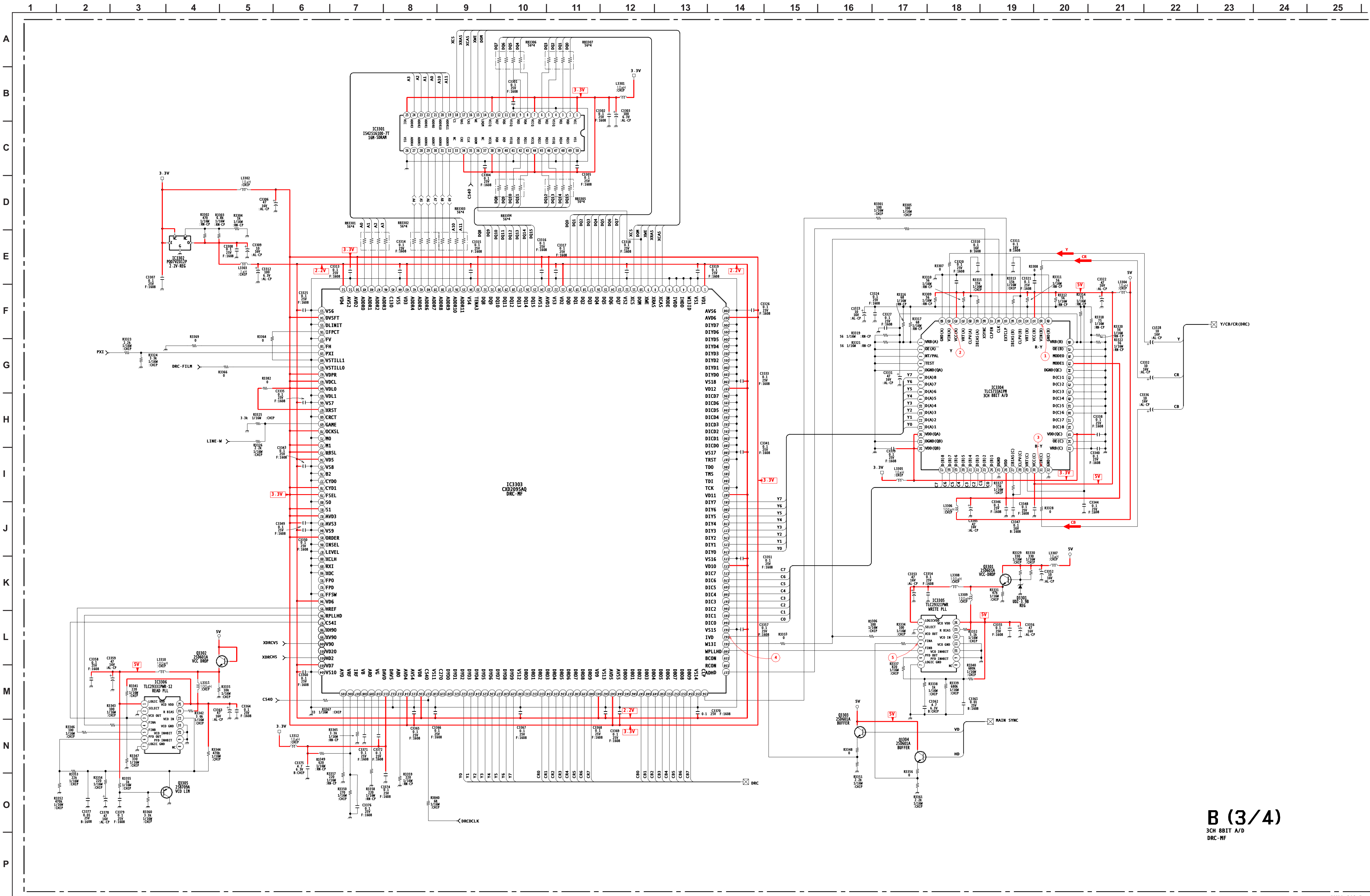


## B BOARD SCHEMATIC DIAGRAM (2 OF 4)





B BOARD SCHEMATIC DIAGRAM (3 OF 4)



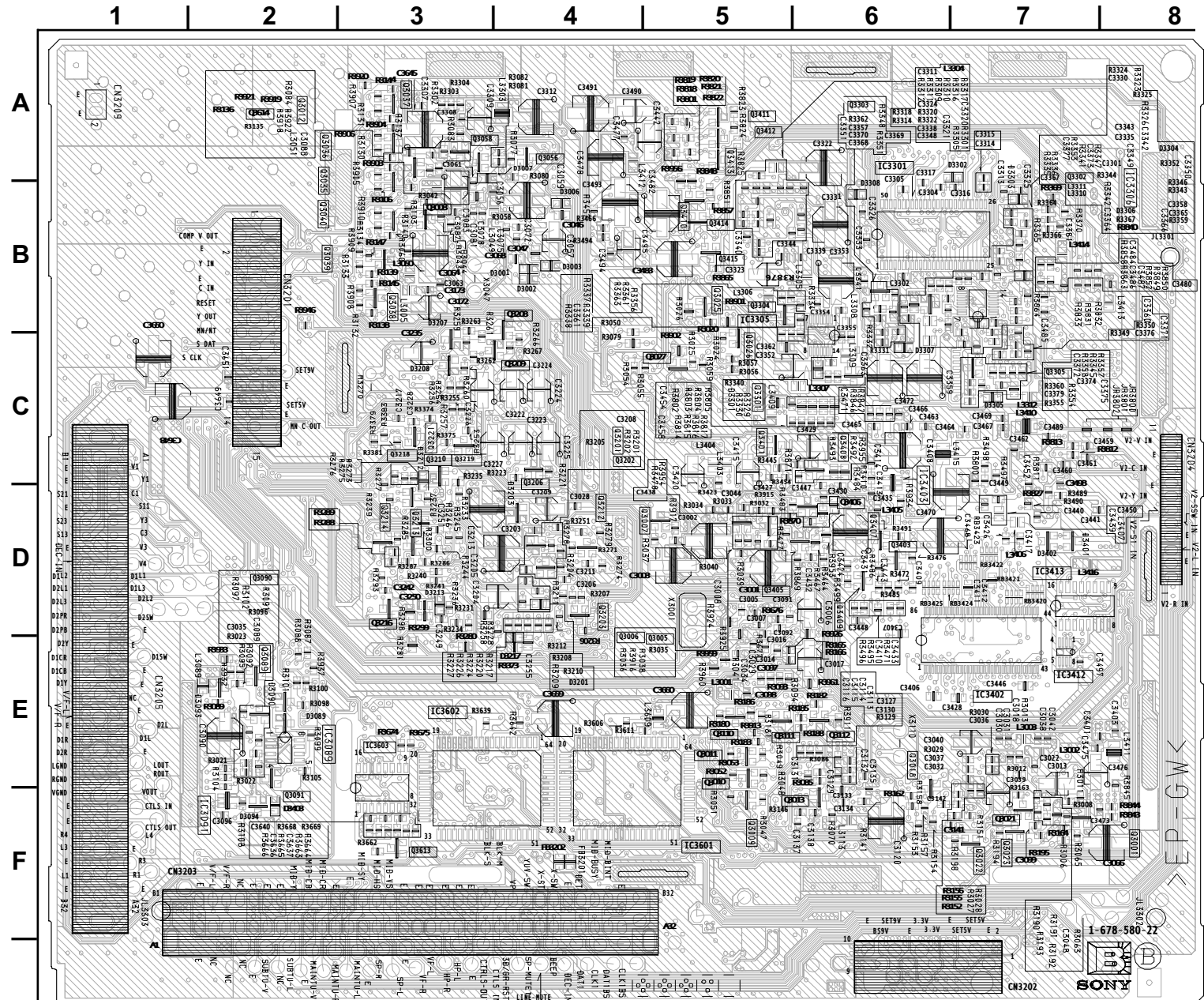
B (3/4)

3CH 8BIT A/D  
DRC-MF





## CONDUCTOR SIDE



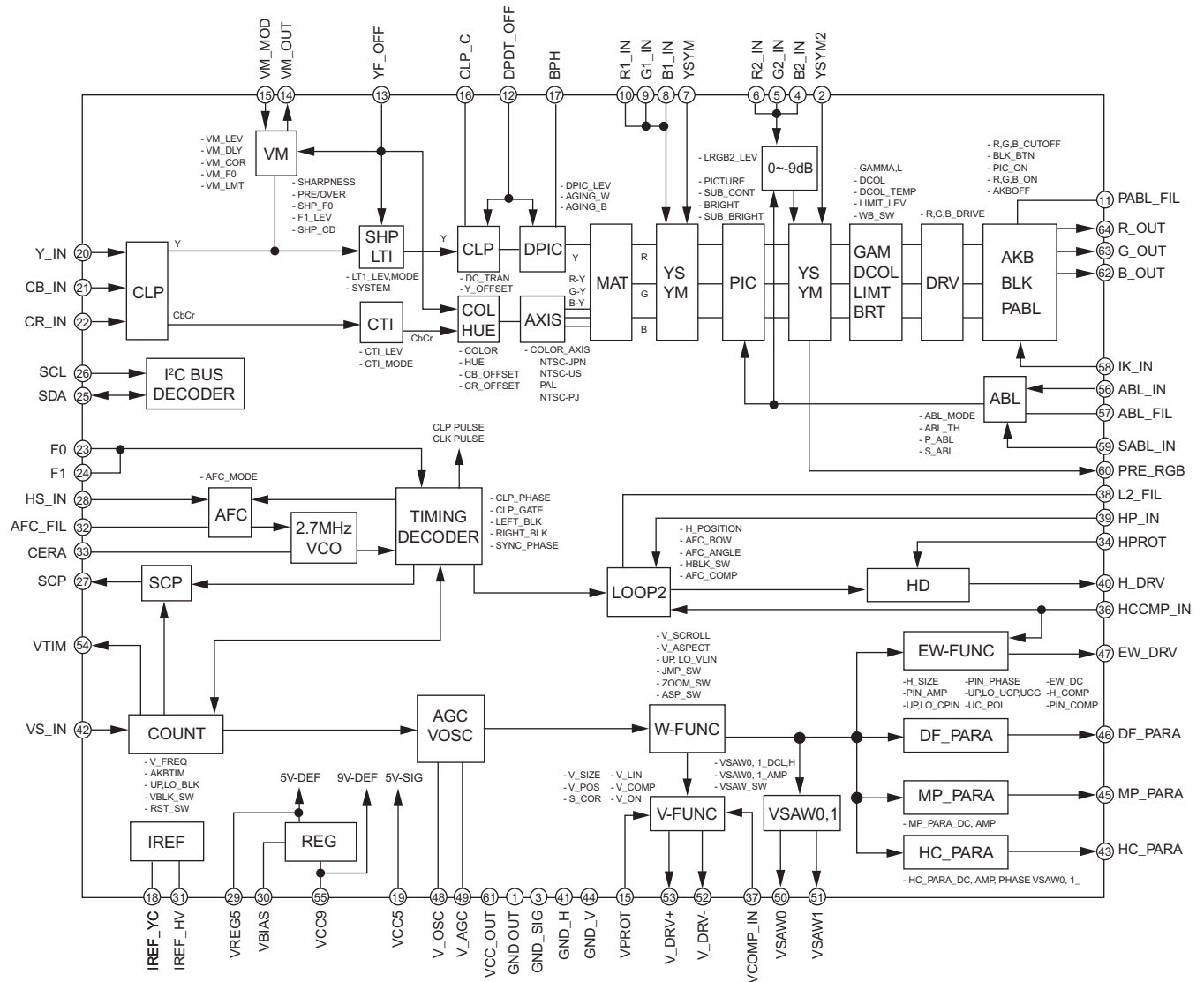
### B BOARD LOCATOR LIST (CONDUCTOR SIDE)

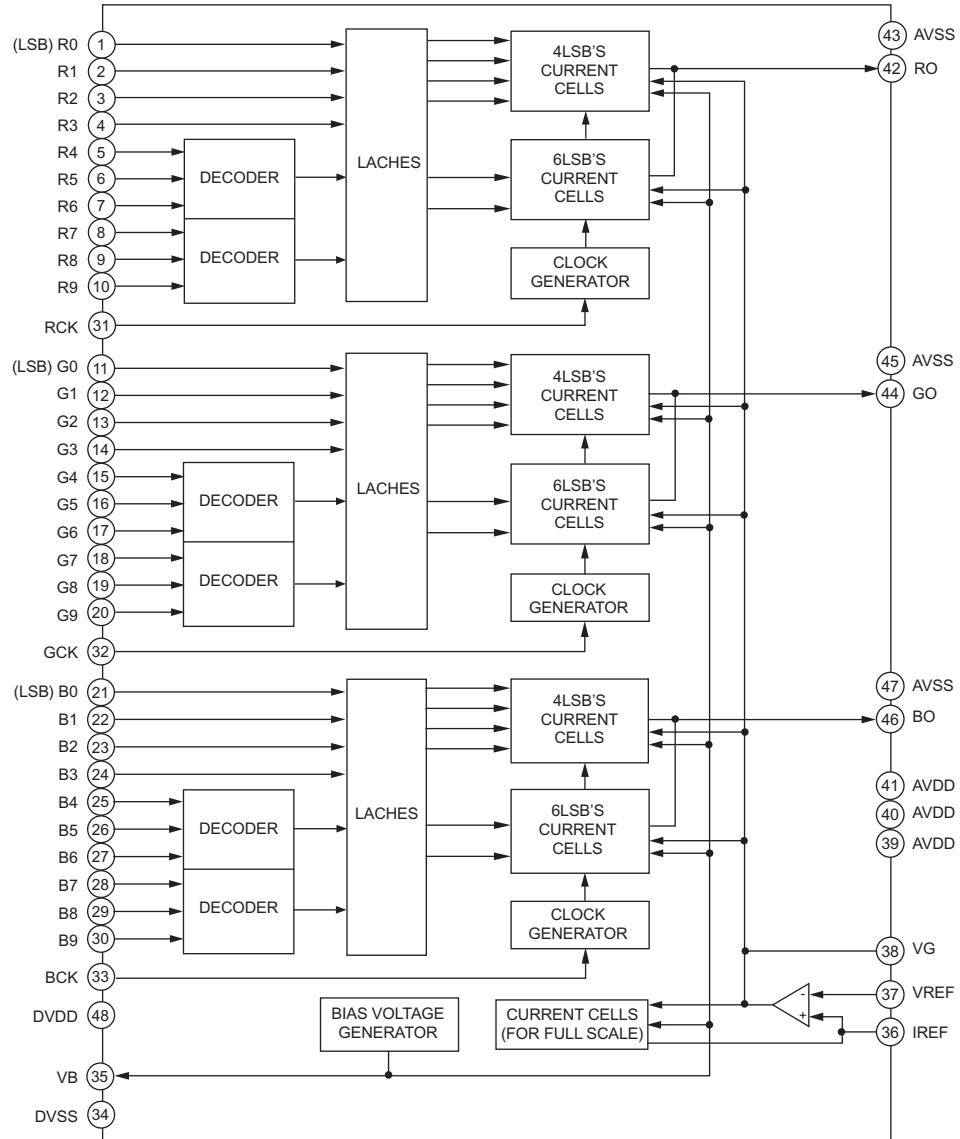
DIODE		D3301	C-5	IC3412	E-8	Q3010	E-5	Q3038	B-3	Q3202	C-4	Q3304	B-5	Q3413	A-5
D3001	B-4	D3401	D-7	IC3413	D-7	Q3011	E-5	Q3039	B-2	Q3203	D-4	Q3305	C-7	Q3414	B-5
D3002	B-4	D3402	D-7	IC3601	F-5	Q3018	E-6	Q3040	B-2	Q3206	C-4	Q3401	C-5	Q3415	B-5
D3003	B-4	D3403	F-2	IC3602	E-3	Q3021	F-7	Q3056	A-4	Q3208	B-4	Q3403	D-6	Q3613	F-3
D3006	B-4	IC		IC3603	E-3	Q3022	F-7	Q3058	A-3	Q3209	C-4	Q3405	D-5		
D3007	B-4	IC3089	E-2	TRANSISTOR		Q3023	F-7	Q3089	E-2	Q3210	C-3	Q3406	D-6		
D3089	E-2	IC3091	F-2	Q3001	F-8	Q3025	B-5	Q3090	D-2	Q3213	D-3	Q3407	D-6		
D3090	E-2	IC3301	B-6	Q3005	E-5	Q3026	B-5	Q3091	F-2	Q3214	D-3	Q3408	C-6		
D3201	E-4	IC3305	B-5	Q3006	E-5	Q3027	B-5	Q3110	E-5	Q3216	D-3	Q3409	D-6		
D3212	C-3	IC3306	B-8	Q3007	D-5	Q3035	B-2	Q3111	E-5	Q3301	C-5	Q3410	B-5		
D3213	D-3	IC3402	E-7	Q3008	B-3	Q3036	A-2	Q3112	E-6	Q3302	A-7	Q3411	A-5		
D3217	E-4	IC3403	C-6	Q3009	F-5	Q3037	A-3	Q3201	C-4	Q3303	A-6	Q3412	A-5		



## IC DIAGRAMS

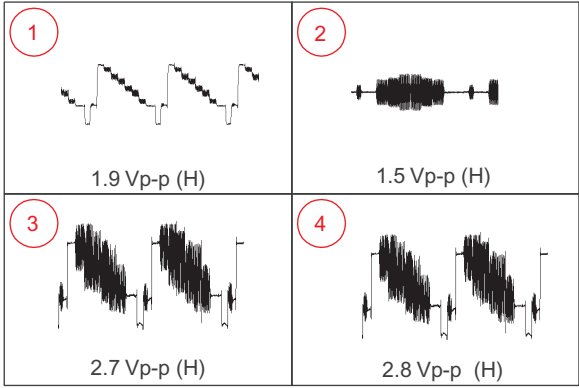
## B BOARD: IC3001 CXA2151Q



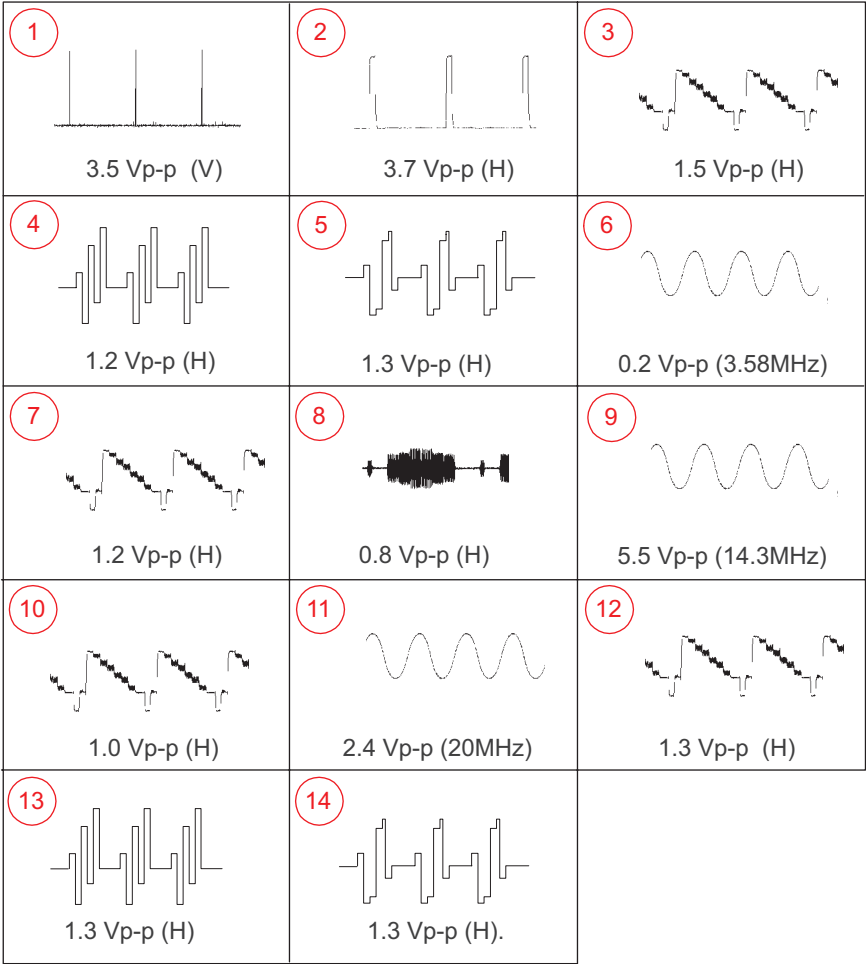
**B BOARD: IC3410 CXD2309Q**

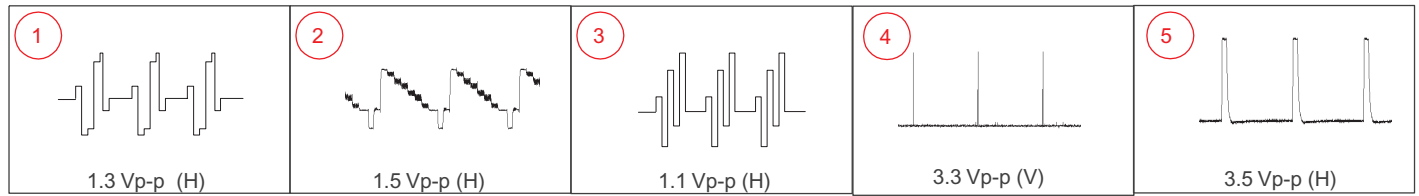
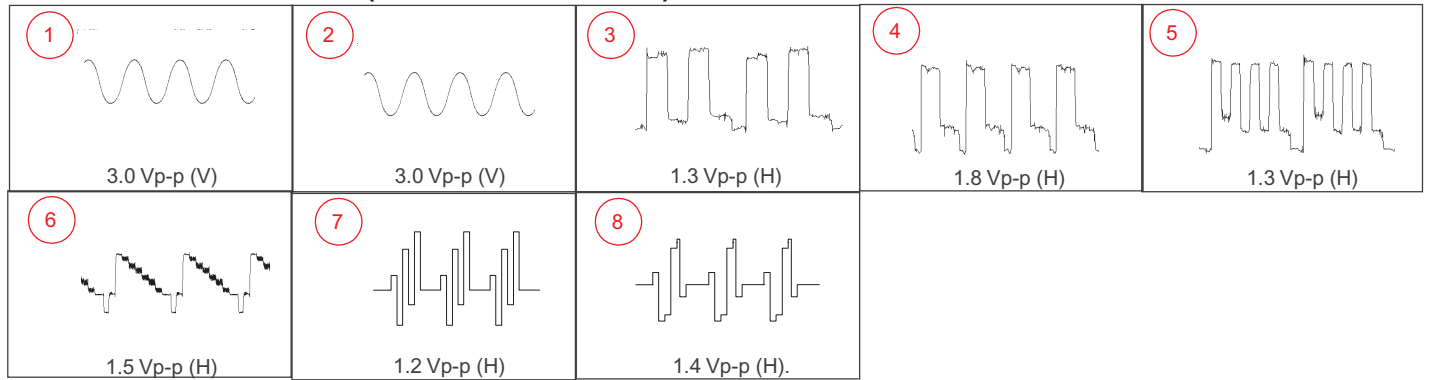


**B BOARD WAVEFORMS (SCHEMATIC 1 OF 4)**



**B BOARD WAVEFORMS (SCHEMATIC 2 OF 4)**



**B BOARD WAVEFORMS (SCHEMATIC 3 OF 4)****B BOARD WAVEFORMS (SCHEMATIC 4 OF 4)****B BOARD TRANSISTOR VOLTAGE LIST**

	B	C	E		B	C	E		B	C	E
Q3001	4.1	9.0	3.4	Q3056	2.1	GND	2.8	Q3304	0.5	4.9	0.2
Q3002	5.1	9.0	5.7	Q3058	1.9	GND	2.5	Q3305	3.2	GND	2.3
Q3003	1.8	GND	5.4	Q3089	4.1	4.7	4.7	Q3401	0.0	4.9	0.0
Q3005	2.2	4.9	1.6	Q3090	4.1	4.7	4.7	Q3402	4.6	3.3	3.1
Q3006	2.9	4.9	2.2	Q3091	0.0	8.9	GND	Q3403	1.0	4.9	0.5
Q3007	2.9	4.8	2.3	Q3101	3.7	9.0	3.1	Q3404	4.6	3.3	3.1
Q3008	1.0	GND	1.6	Q3102	2.8	9.0	2.2	Q3405	2.3	GND	3.0
Q3009	2.0	GND	0.0	Q3103	1.1	GND	1.7	Q3406	2.3	GND	3.0
Q3010	2.0	GND	0.0	Q3104	1.5	GND	2.1	Q3407	1.7	4.9	1.2
Q3011	1.2	GND	0.0	Q3110	0.8	GND	1.5	Q3408	2.3	GND	3.0
Q3014	2.7	GND	3.3	Q3111	1.2	GND	1.8	Q3409	1.7	4.9	1.2
Q3015	1.0	GND	1.6	Q3112	1.2	GND	1.8	Q3410	0.5	GND	1.2
Q3016	1.1	GND	1.7	Q3201	4.6	2.9	2.5	Q3411	1.5	GND	2.2
Q3017	4.1	4.8	0.7	Q3202	2.7	9.0	2.3	Q3412	1.5	GND	2.2
Q3018	1.5	4.1	0.9	Q3203	3.1	GND	3.7	Q3413	1.5	GND	2.2
Q3021	2.9	9.0	0.7	Q3204	1.8	GND	2.2	Q3414	0.8	GND	1.5
Q3022	7.9	9.0	0.0	Q3205	4.4	9.0	3.8	Q3415	1.4	GND	2.0
Q3023	0.7	7.9	0.3	Q3206	4.9	9.0	4.3	Q3603	1.0	4.9	0.3
Q3025	2.5	5.0	1.4	Q3207	8.9	-1.0	8.9	Q3604	0.0	9.0	0.0
Q3026	2.7	5.0	1.4	Q3208	-0.3	0.0	GND	Q3605	0.0	9.0	0.0
Q3027	2.8	5.0	1.4	Q3209	-0.3	0.0	GND	Q3606	0.0	9.0	0.0
Q3035	5.1	9.0	4.3	Q3210	2.7	GND	3.1	Q3609	1.9	4.9	1.3
Q3036	5.1	9.0	4.3	Q3211	0.4	8.9	GND	Q3610	0.0	9.0	0.0
Q3037	5.1	9.0	4.3	Q3213	3.8	7.9	3.2	Q3611	0.0	9.0	0.0
Q3038	4.9	9.0	4.1	Q3214	7.9	5.8	8.5	Q3612	0.0	9.0	0.0
Q3039	4.9	9.0	4.1	Q3215	8.5	0.0	9.0	Q3613	3.7	4.9	3.0
Q3040	4.9	9.0	4.1	Q3216	0.1	4.9	GND	Q3617	0.5	4.7	GND
Q3049	5.3	8.9	4.7	Q3217	3.6	9.0	3.1	Q3618	0.2	4.7	GND
Q3051	2.3	GND	3.0	Q3301	3.9	4.9	3.4	Q3619	0.5	0.1	GND
Q3053	2.0	GND	2.6	Q3302	4.9	4.9	3.4	Q3620	0.2	0.2	GND
Q3054	5.7	8.9	5.1	Q3303	0.5	4.9	0.1				

All voltages are in V.

**B BOARD IC VOLTAGE LIST (1 OF 5)**

IC3001		3	2.7	5	0.0	41	1.7	35	N/C	89	5.0	34	N/C		
PIN	VOLT	4	2.8	6	GND	42	2.4	36	N/C	90	GND	35	N/C		
1	3.2	5	0.0	7	GND	43	GND	37	N/C	91	N/C	36	2.6		
2	3.2	6	GND	8	GND	44	N/C	38	N/C	92	N/C	37	N/C		
3	3.2	7	GND	9	4.9	45	3.1	39	N/C	93	GND	38	N/C		
4	1.2	8	GND	10	4.9	46	2.8	40	N/C	94	N/C	39	N/C		
5	1.0	9	4.9	11	0.0	47	4.8	41	GND	95	2.9	40	1.7		
6	GND	10	4.9	12	0.3	48	3.1	42	0.0	96	0.0	41	1.8		
7	N/C	11	4.9	13	0.6	IC3089		43	5.0	97	2.9	42	2.4		
8	N/C	12	0.1	14	0.3	PIN	VOLT	44	5.0	98	4.3	43	0.0		
9	N/C	13	2.6	15	0.6	1	GND	45	4.9	99	2.9	44	2.4		
10	1.0	14	2.7	16	4.9	2	GND	46	GND	100	4.3	45	3.4		
11	0.9	15	2.5	IC3048		3	0.0	47	GND	IC3091		46	2.4		
12	4.8	16	4.9	PIN	VOLT	4	GND	48	GND	PIN	VOLT	47	4.8		
13	4.0	IC3003		1	1.7	5	4.6	49	N/C	1	N/C	48	3.1		
14	4.0	PIN	VOLT	2	0.2	6	4.6	50	N/C	2	GND	All voltages are in V.			
15	2.7	1	1.0	3	4.6	7	4.9	51	N/C	3	GND				
16	2.3	2	GND	4	4.6	8	4.9	52	N/C	4	4.9				
17	1.0	3	4.8	5	GND	IC3090		53	0.0	5	4.9				
18	2.8	4	1.0	6	N/C	PIN	VOLT	54	N/C	IC3110					
19	0.0	5	N/C	7	4.9	1	0.0	55	0.0	PIN	VOLT				
20	2.7	6	4.8	8	2.8	2	0.0	56	N/C	1	1.0				
21	0.0	7	0.5	9	N/C	3	0.0	57	0.0	2	4.6				
22	0.3	8	GND	10	N/C	4	N/C	58	N/C	3	4.6				
23	0.0	9	1.9	11	2.3	5	N/C	59	N/C	4	4.6				
24	GND	10	2.6	12	N/C	6	N/C	60	N/C	5	GND				
25	2.9	11	0.9	13	GND	7	N/C	61	N/C	6	N/C				
26	2.8	12	2.0	14	N/C	8	N/C	62	N/C	7	4.9				
27	2.2	13	GND	15	0.5	9	0.0	63	N/C	8	2.6				
28	4.8	14	0.0	16	2.4	10	0.0	64	N/C	9	N/C				
29	GND	15	GND	17	2.0	11	N/C	65	2.6	10	N/C				
30	4.6	16	GND	18	3.1	12	N/C	66	N/C	11	2.4				
31	4.6	17	N/C	19	N/C	13	N/C	67	N/C	12	N/C				
32	GND	18	GND	20	0.5	14	N/C	68	N/C	13	GND				
33	3.1	19	4.9	21	0.0	15	N/C	69	N/C	14	N/C				
34	3.1	20	N/C	22	1.8	16	N/C	70	N/C	15	0.5				
35	3.1	21	4.9	23	2.1	17	N/C	71	N/C	16	N/C				
36	3.2	22	GND	24	2.0	18	N/C	72	N/C	17	1.6				
37	3.2	23	N/C	25	3.4	19	N/C	73	GND	18	2.8				
38	N/C	24	GND	26	3.4	20	N/C	74	5.0	19	N/C				
39	N/C	25	2.4	27	3.4	21	N/C	75	GND	20	0.5				
40	4.8	26	4.8	28	0.0	22	N/C	76	N/C	21	0.0				
41	3.1	27	2.2	29	N/C	23	N/C	77	N/C	22	1.2				
42	3.1	28	2.2	30	N/C	24	N/C	78	N/C	23	2.0				
43	3.1	29	4.8	31	N/C	25	GND	79	N/C	24	1.9				
44	3.3	30	GND	32	4.8	26	GND	80	N/C	25	3.4				
45	3.2	31	GND	33	3.4	27	N/C	81	N/C	26	3.4				
46	N/C	32	1.0	34	3.1	28	N/C	82	GND	27	3.4				
47	N/C	IC3004		35	0.0	29	N/C	83	GND	28	N/C				
48	GND	PIN	VOLT	36	2.6	30	N/C	84	GND	29	N/C				
IC3002		1	0.6	37	3.4	31	N/C	85	GND	30	N/C				
PIN	VOLT	2	0.5	38	3.1	32	0.0	86	GND	31	N/C				
1	2.4	3	0.5	39	3.1	33	0.0	87	N/C	32	4.8				
2	0.0	4	0.5	40	1.7	34	N/C	88	N/C	33	N/C				

**B BOARD IC VOLTAGE LIST (2 OF 5)**

IC3201		52	4.5	IC3301		IC3302		44	GND	96	2.0	148	1.6	200	GND
PIN	VOLT	53	3.8	PIN	VOLT	PIN	VOLT	45	N/C	97	1.3	149	2.2	201	GND
1	3.9	54	4.5	1	3.3	I	3.3	46	0.0	98	N/C	150	2.4	202	GND
2	4.4	55	N/C	2	1.5	G	GND	47	0.0	99	N/C	151	2.3	203	GND
3	3.9	56	3.4	3	1.6	O	2.2	48	0.0	100	0.0	152	2.3	204	GND
4	4.4	57	GND	4	GND	VC	3.3	49	0.0	101	N/C	153	2.0	205	GND
5	4.4	58	4.3	5	1.5	NC	0.0	50	3.3	102	0.2	154	1.2	206	GND
6	N/C	59	4.4	6	1.5	IC3303		51	GND	103	2.2	155	GND	207	3.3
7	4.9	60	3.9	7	3.3	PIN	VOLT	52	2.2	104	GND	156	1.6	208	GND
8	4.0	61	4.4	8	1.9	1	2.2	53	GND	105	0.4	157	3.3	All voltages are in V.	
9	4.5	62	4.4	9	1.8	2	GND	54	3.3	106	1.0	158	N/C		
10	4.4	63	4.8	10	GND	3	GND	55	GND	107	1.0	159	N/C		
11	4.5	64	4.4	11	1.2	4	GND	56	GND	108	1.0	160	0.8		
12	4.4	IC3202		12	0.5	5	GND	57	GND	109	0.5	161	0.9		
13	N/C	PIN	VOLT	13	3.3	6	GND	58	GND	110	2.2	162	0.0		
14	N/C	1	GND	14	3.2	7	1.9	59	0.0	111	3.3	163	GND		
15	4.4	2	4.4	15	3.2	8	2.0	60	GND	112	GND	164	1.4		
16	4.4	3	9.0	16	3.2	9	2.0	61	0.0	113	0.5	165	1.9		
17	3.9	4	4.4	17	3.2	10	0.3	62	3.3	114	3.3	166	1.8		
18	4.4	5	4.4	18	3.2	11	1.9	63	3.3	115	GND	167	1.9		
19	4.4	6	4.4	19	0.0	12	GND	64	3.3	116	2.2	168	1.9		
20	N/C	7	N/C	20	0.0	13	0.6	65	GND	117	0.0	169	1.9		
21	4.9	8	N/C	21	0.0	14	1.0	66	GND	118	GND	170	1.9		
22	4.3	9	N/C	22	0.0	15	1.9	67	3.3	119	N/C	171	1.3		
23	4.4	10	4.4	23	0.0	16	1.3	68	GND	120	N/C	172	2.2		
24	3.9	11	4.4	24	0.0	17	1.0	69	0.0	121	N/C	173	GND		
25	4.4	12	4.4	25	3.3	18	1.0	70	3.3	122	1.4	174	1.5		
26	4.4	13	4.4	26	GND	19	1.2	71	GND	123	1.3	175	1.6		
27	N/C	14	N/C	27	0.0	20	1.0	72	3.3	124	1.4	176	1.3		
28	4.9	15	N/C	28	0.0	21	2.2	73	3.3	125	1.4	177	1.0		
29	N/C	16	4.4	29	0.0	22	GND	74	2.2	126	1.0	178	2.3		
30	N/C	17	4.4	30	0.0	23	3.3	75	GND	127	0.9	179	0.7		
31	N/C	18	4.4	31	0.0	24	GND	76	GND	128	1.1	180	1.6		
32	GND	19	4.4	32	0.0	25	0.8	77	GND	129	0.9	181	0.8		
33	4.4	20	N/C	33	N/C	26	0.8	78	3.3	130	GND	182	2.2		
34	4.6	21	N/C	34	3.3	27	0.6	79	3.3	131	N/C	183	GND		
35	GND	22	N/C	35	1.7	28	1.2	80	GND	132	N/C	184	N/C		
36	N/C	23	4.4	36	0.5	29	0.7	81	3.3	133	1.6	185	N/C		
37	N/C	24	4.4	37	N/C	30	0.9	82	3.3	134	1.6	186	N/C		
38	4.5	25	4.4	38	3.3	31	1.0	83	GND	135	2.2	187	GND		
39	N/C	26	GND	39	1.6	32	0.9	84	GND	136	2.2	188	GND		
40	4.5	27	4.6	40	1.6	33	3.3	85	3.3	137	2.2	189	GND		
41	4.5	28	4.6	41	GND	34	GND	86	GND	138	2.1	190	GND		
42	9.0	IC3203		42	1.5	35	0.0	87	GND	139	2.2	191	GND		
43	4.5	PIN	VOLT	43	1.5	36	0.0	88	GND	140	1.1	192	GND		
44	4.4	1	4.4	44	3.3	37	0.0	89	GND	141	2.2	193	GND		
45	4.5	2	4.4	45	1.8	38	0.0	90	GND	142	GND	194	GND		
46	N/C	3	4.4	46	2.0	39	0.0	91	N/C	143	3.3	195	GND		
47	4.4	4	GND	47	GND	40	0.0	92	N/C	144	GND	196	GND		
48	N/C	5	4.4	48	1.7	41	0.0	93	GND	145	N/C	197	2.2		
49	4.1	6	4.4	49	1.2	42	0.0	94	2.2	146	N/C	198	GND		
50	4.5	7	4.4	50	GND	43	2.2	95	1.0	147	1.6	199	GND		
51	4.4	8	9.0												

**B BOARD IC VOLTAGE LIST (3 OF 5)**

IC3304		51	4.8	N/C	0.0	50	1.0	7	GND
PIN	VOLT	52	4.4	IC3402		51	1.6	8	N/C
1	1.6	53	2.4	PIN	VOLT	52	GND	9	0.0
2	GND	54	2.4	1	3.3	53	0.9	10	GND
3	GND	55	1.6	2	1.8	54	0.9	11	GND
4	GND	56	0.5	3	3.3	55	3.3	12	0.9
5	GND	57	GND	4	1.3	56	1.1	13	3.6
6	1.2	58	3.3	5	0.9	57	N/C	14	4.8
7	1.2	59	3.3	6	GND	58	GND	IC3405	
8	0.0	60	1.6	7	2.4	59	2.4	PIN	VOLT
9	1.9	61	3.2	8	2.2	60	0.0	1	4.8
10	0.1	62	4.8	9	3.3	61	2.4	2	0.3
11	0.8	63	2.1	10	0.9	62	2.2	3	GND
12	2.0	64	GND	11	2.8	63	1.7	4	0.3
13	1.6	IC3305		12	GND	64	1.7	5	4.8
14	3.3	PIN	VOLT	13	0.9	65	1.8	IC3406	
15	0.0	1	3.4	14	N/C	66	0.1	PIN	VOLT
16	3.3	2	GND	15	3.3	67	2.9	1	4.8
17	0.0	3	1.6	16	0.1	68	1.8	2	0.0
18	3.2	4	0.2	17	3.1	69	N/C	3	GND
19	3.2	5	1.3	18	2.9	70	N/C	4	0.0
20	3.2	6	1.4	19	3.3	71	0.1	5	4.8
21	3.2	7	GND	20	2.8	72	GND	IC3407	
22	3.2	8	N/C	21	N/C	73	N/C	PIN	VOLT
23	2.0	9	GND	22	1.7	74	1.8	1	4.8
24	1.1	10	GND	23	1.7	75	3.3	2	1.0
25	GND	11	GND	24	0.1	76	1.3	3	GND
26	4.8	12	1.4	25	0.1	77	0.7	4	2.4
27	2.4	13	2.2	26	2.3	78	GND	5	4.8
28	2.4	14	3.4	27	0.1	79	2.5	All voltages are in V.	
29	3.2	IC3306		28	2.4	80	0.7		
30	4.8	PIN	VOLT	29	3.3	81	3.3		
31	2.4	1	4.8	30	N/C	82	1.0		
32	GND	2	GND	31	1.7	83	2.8		
33	1.5	3	1.9	32	GND	84	GND		
34	GND	4	3.3	33	1.6	85	1.1		
35	3.3	5	1.6	34	1.3	86	GND		
36	N/C	6	2.2	35	3.3	IC3403			
37	N/C	7	GND	36	1.6	PIN	VOLT		
38	GND	8	N/C	37	1.7	1	N/C		
39	GND	9	GND	38	GND	2	GND		
40	GND	10	GND	39	0.9	3	GND		
41	GND	11	GND	40	1.7	4	1.7		
42	GND	12	2.3	41	3.3	5	2.5		
43	GND	13	2.1	42	1.1	IC3404			
44	GND	14	4.2	43	3.3	PIN	VOLT		
45	4.9	IC3401		44	GND	1	4.8		
46	GND	PIN	VOLT	45	1.7	2	GND		
47	GND	I	3.3	46	GND	3	2.3		
48	1.5	G	GND	47	1.7	4	0.3		
49	GND	O	2.5	48	1.4	5	2.4		
50	0.0	VC	3.3	49	3.3	6	0.9		

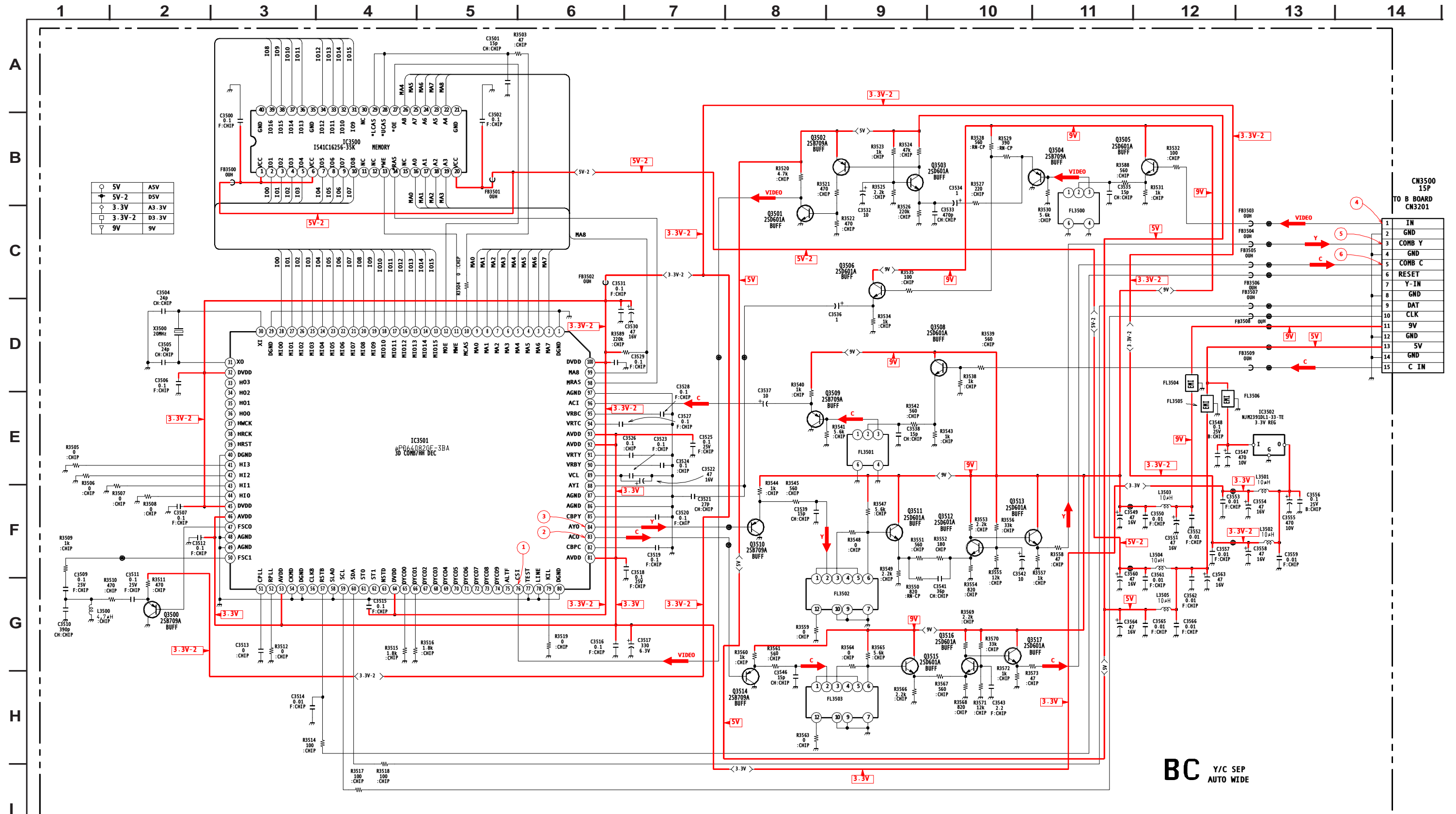
**B BOARD IC VOLTAGE LIST (4 OF 5)**

<b>IC3408</b>		53	1.4	107	3.3	161	0.7	215	1.0	20	0.8	4	0.1
<b>PIN</b>	<b>VOLT</b>	54	3.3	108	1.7	162	2.5	216	GND	21	GND	5	0.3
1	GND	55	GND	109	1.7	163	GND	217	GND	22	GND	6	GND
2	GND	56	1.6	110	1.1	164	2.5	218	GND	23	1.4	7	GND
3	N/C	57	1.6	111	1.7	165	0.7	219	GND	24	1.5	8	GND
4	N/C	58	1.5	112	0.9	166	1.3	220	GND	25	1.5	9	5.0
5	N/C	59	1.5	113	1.7	167	1.8	221	1.2	26	1.5	10	0.0
6	3.3	60	1.5	114	3.3	168	0.9	222	GND	27	1.5	11	5.0
7	GND	61	1.4	115	GND	169	1.1	223	GND	28	1.5	12	0.0
8	GND	62	2.4	116	1.6	170	1.1	224	GND	29	1.5	13	0.0
9	0.0	63	0.9	117	1.3	171	GND	225	GND	30	1.9	14	0.0
10	0.2	64	0.8	118	1.6	172	GND	226	GND	31	1.6	15	0.0
11	0.0	65	0.9	119	1.7	173	GND	227	GND	32	1.7	16	4.9
12	0.0	66	3.3	120	0.0	174	3.3	228	GND	33	1.6	<b>IC3414</b>	
13	0.0	67	GND	121	2.4	175	GND	229	GND	34	GND	<b>PIN</b>	<b>VOLT</b>
14	0.0	68	0.8	122	2.2	176	GND	230	GND	35	1.0	1	4.6
15	0.0	69	0.6	123	1.7	177	GND	231	GND	36	0.0	2	5.0
16	2.3	70	0.9	124	1.7	178	GND	232	GND	37	2.0	3	3.1
17	1.6	71	0.9	125	1.8	179	GND	233	GND	38	2.6	4	GND
18	3.3	72	3.2	126	3.3	180	GND	234	GND	39	4.8	5	3.1
19	GND	73	3.2	127	GND	181	GND	235	GND	40	4.8	6	3.1
20	0.6	74	0.9	128	0.1	182	GND	236	GND	41	4.8	7	5.0
21	1.1	75	GND	129	0.1	183	GND	237	GND	42	1.0	8	4.6
22	2.2	76	3.3	130	2.3	184	GND	238	GND	43	0.0	9	4.6
23	2.2	77	2.5	131	0.1	185	GND	239	GND	44	0.5	10	GND
24	2.4	78	GND	132	0.1	186	GND	240	GND	45	0.0	11	4.6
25	2.4	79	1.7	133	1.7	187	GND	<b>IC3409</b>		46	0.0	12	5.0
26	2.3	80	3.3	134	1.7	188	GND	<b>PIN</b>	<b>VOLT</b>	47	0.0	13	8.9
27	2.2	81	N/C	135	2.8	189	GND	I	3.3	48	4.8	14	4.6
28	1.6	82	2.5	136	GND	190	GND	G	3.3	<b>IC3411</b>		15	GND
29	0.9	83	2.3	137	1.6	191	GND	O	2.5	<b>PIN</b>	<b>VOLT</b>	16	4.6
30	GND	84	0.4	138	3.3	192	GND	VC	3.3	1	3.2	All voltages are in V.	
31	1.1	85	0.0	139	GND	193	3.3	NC	0.0	2	N/C		
32	1.0	86	0.0	140	1.5	194	2.4	<b>IC3410</b>		3	3.2		
33	1.5	87	2.3	141	0.0	195	2.4	<b>PIN</b>	<b>VOLT</b>	4	GND		
34	1.4	88	1.6	142	2.6	196	0.0	1	GND	5	0.1		
35	1.4	89	2.5	143	3.0	197	2.4	2	GND	6	3.3		
36	2.4	90	GND	144	3.1	198	GND	3	0.9	7	0.0		
37	1.8	91	1.2	145	2.5	199	1.0	4	0.9	8	3.3		
38	GND	92	3.3	146	0.0	200	N/C	5	0.6	<b>IC3412</b>			
39	1.4	93	3.0	147	0.0	201	0.0	6	0.8	<b>PIN</b>	<b>VOLT</b>		
40	1.4	94	3.0	148	0.9	202	1.0	7	0.9	1	0.3		
41	1.5	95	GND	149	2.8	203	GND	8	0.8	2	5.0		
42	2.4	96	3.3	150	GND	204	GND	9	0.9	3	N/C		
43	GND	97	GND	151	0.9	205	N/C	10	2.4	4	GND		
44	0.8	98	3.3	152	2.2	206	2.4	11	GND	5	GND		
45	1.0	99	1.1	153	2.4	207	GND	12	GND	6	GND		
46	0.7	100	0.9	154	0.7	208	1.0	13	1.2	7	0.3		
47	2.4	101	2.5	155	1.3	209	2.4	14	1.1	8	5.0		
48	0.9	102	GND	156	2.5	210	1.0	15	1.0	<b>IC3413</b>			
49	1.0	103	0.9	157	1.8	211	GND	16	0.9	<b>PIN</b>	<b>VOLT</b>		
50	1.1	104	1.6	158	1.1	212	2.0	17	2.4	1	0.0		
51	1.2	105	1.0	159	2.8	213	4.5	18	0.7	2	0.5		
52	1.9	106	1.4	160	1.6	214	2.4	19	1.0	3	0.1		

**B BOARD IC VOLTAGE LIST (5 OF 5)**

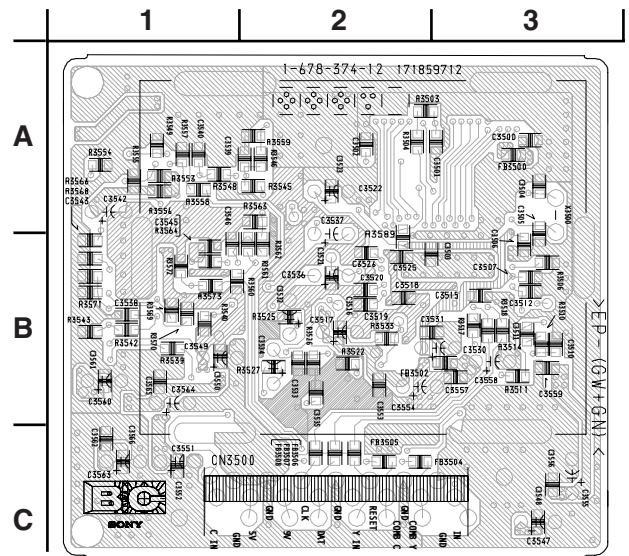
<b>IC3601</b>		54	N/C	43	GND
<b>PIN</b>	<b>VOLT</b>	55	N/C	44	N/C
1	N/C	56	N/C	45	N/C
2	N/C	57	N/C	46	N/C
3	N/C	58	N/C	47	N/C
4	N/C	59	N/C	48	4.6
5	N/C	60	N/C	49	N/C
6	N/C	61	N/C	50	4.6
7	0.2	62	N/C	51	N/C
8	0.1	63	N/C	52	N/C
9	4.9	64	N/C	53	N/C
10	GND	<b>IC3602</b>		54	N/C
11	2.4	<b>PIN</b>	<b>VOLT</b>	55	GND
12	2.1	1	N/C	56	GND
13	GND	2	N/C	57	GND
14	GND	3	N/C	58	GND
15	GND	4	N/C	59	GND
16	4.9	5	N/C	60	GND
17	4.9	6	N/C	61	N/C
18	GND	7	0.2	62	N/C
19	GND	8	0.1	63	N/C
20	1.6	9	4.9	64	N/C
21	2.4	10	GND	<b>IC3603</b>	
22	1.5	11	2.4	<b>PIN</b>	<b>VOLT</b>
23	4.9	12	2.2	1	4.9
24	0.0	13	GND	2	GND
25	N/C	14	GND	3	4.9
26	N/C	15	GND	4	1.4
27	N/C	16	4.9	5	4.9
28	N/C	17	GND	6	1.9
29	N/C	18	GND	7	1.6
30	N/C	19	GND	8	GND
31	0.0	20	1.7	9	4.6
32	0.0	21	2.5	10	4.6
33	0.0	22	2.5	11	4.9
34	0.0	23	4.9	12	2.6
35	N/C	24	2.4	13	2.4
36	0.0	25	N/C	14	GND
37	N/C	26	N/C	15	0.1
38	2.4	27	N/C	16	0.1
39	2.4	28	N/C	<b>IC3604</b>	
40	4.9	29	N/C	<b>PIN</b>	<b>VOLT</b>
41	4.9	30	N/C	1	0.1
42	GND	31	0.0	2	0.1
43	GND	32	0.0	3	2.5
44	N/C	33	0.0	4	GND
45	N/C	34	0.0	5	2.5
46	N/C	35	N/C	6	0.0
47	N/C	36	0.0	7	0.1
48	4.6	37	N/C	8	5.0
49	N/C	38	2.4	All voltages are in V.	
50	4.6	39	2.4		
51	N/C	40	4.9		
52	N/C	41	4.9		
53	N/C	42	GND		

## BC BOARD SCHEMATIC DIAGRAM





## CONDUCTOR SIDE



## BC BOARD TRANSISTOR VOLTAGE LIST

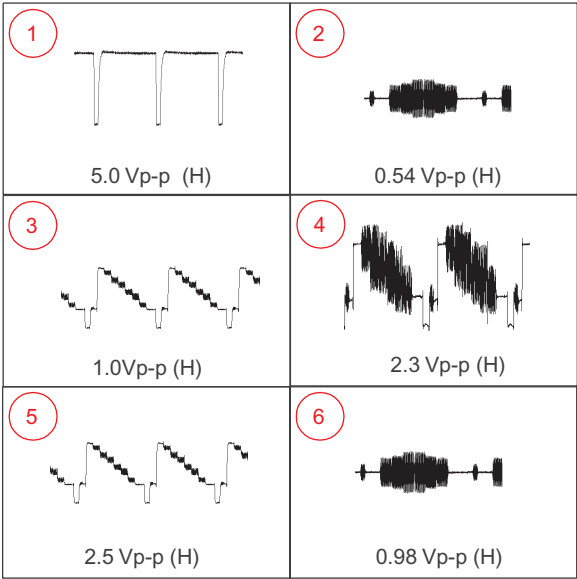
	B	C	E		B	C	E
Q3500	1.7	GND	2.3	Q3510	1.7	GND	2.3
Q3501	0.1	4.2	GND	Q3511	2.9	8.9	2.3
Q3502	4.6	0.4	4.9	Q3512	2.3	6.1	1.7
Q3503	3.3	4.7	4.0	Q3513	6.1	8.9	5.5
Q3504	2.9	GND	3.5	Q3514	1.6	GND	2.3
Q3505	3.8	8.9	3.2	Q3515	2.9	8.9	2.3
Q3506	6.0	8.9	5.3	Q3516	2.3	6.4	1.7
Q3508	2.4	8.9	1.8	Q3517	6.4	8.9	5.7
Q3509	1.6	GND	2.3	All voltages are in V.			

## BC BOARD IC VOLTAGE LIST

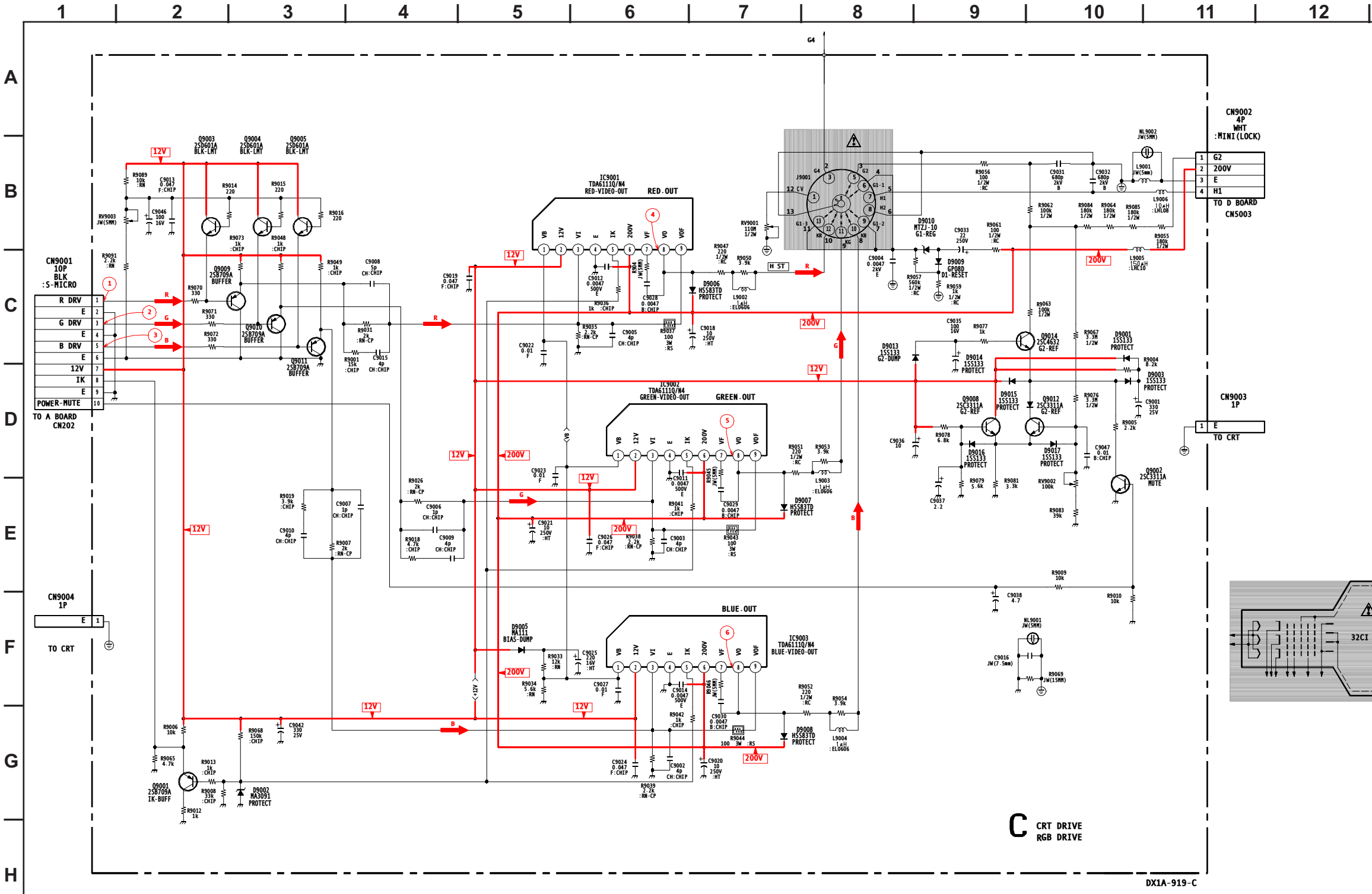
IC3500		18	1.5	37	1.8	14	2.5	33	N/C	52	0.0	71	N/C	90	0.9
PIN	VOLT	19	1.5	38	1.8	15	1.3	34	N/C	53	3.2	72	N/C	91	1.6
1	4.8	20	4.8	39	1.8	16	1.2	35	N/C	54	GND	73	N/C	92	3.2
2	2.0	21	N/C	40	N/C	17	1.9	36	N/C	55	GND	74	N/C	93	3.2
3	2.0	22	1.5	IC3501		18	1.8	37	N/C	56	N/C	75	N/C	94	3.2
4	1.8	23	1.5	PIN	VOLT	19	1.9	38	N/C	57	5.0	76	4.1	95	2.0
5	1.9	24	1.5	1	GND	20	1.8	39	N/C	58	GND	77	GND	96	2.6
6	4.8	25	1.5	2	1.5	21	0.9	40	GND	59	4.5	78	GND	97	GND
7	1.0	26	1.5	3	1.5	22	0.8	41	0.0	60	4.5	79	0.0	98	0.5
8	1.4	27	2.4	4	1.5	23	1.4	42	0.0	61	N/C	80	GND	99	1.5
9	1.1	28	1.0	5	1.5	24	1.0	43	0.0	62	N/C	81	3.2	100	3.2
10	0.8	29	1.0	6	1.5	25	1.8	44	0.0	63	N/C	82	1.0	IC3502	
11	N/C	30	N/C	7	1.5	26	1.8	45	3.2	64	3.2	83	1.6	PIN	VOLT
12	N/C	31	1.9	8	1.5	27	1.3	46	3.2	65	0.0	84	1.7	I	4.8
13	2.9	32	2.5	9	1.5	28	2.0	47	1.7	66	0.0	85	1.0	G	GND
14	0.5	33	1.3	10	1.0	29	GND	48	GND	67	N/C	86	GND	O	3.3
15	N/C	34	1.2	11	2.8	30	1.4	49	GND	68	N/C	87	GND	All voltages are in V.	
16	1.5	35	N/C	12	2.4	31	1.5	50	1.4	69	N/C	88	1.3		
17	1.5	36	1.9	13	1.9	32	3.2	51	0.0	70	N/C	89	0.5		

— 76 —

BC BOARD WAVEFORMS



C BOARD SCHEMATIC DIAGRAM



C BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9001	7.5	0.0	3.6
Q9002	0.2	11.1	GND
Q9003	2.1	12.0	4.0
Q9004	2.1	12.0	3.2
Q9005	3.2	12.0	2.1
Q9008	5.4	12.0	4.8
Q9009	4.0	GND	4.6
Q9010	3.2	GND	4.0
Q9011	4.7	GND	3.9
Q9012	5.4	10.5	4.8
Q9014	11.7	450.0	11.1

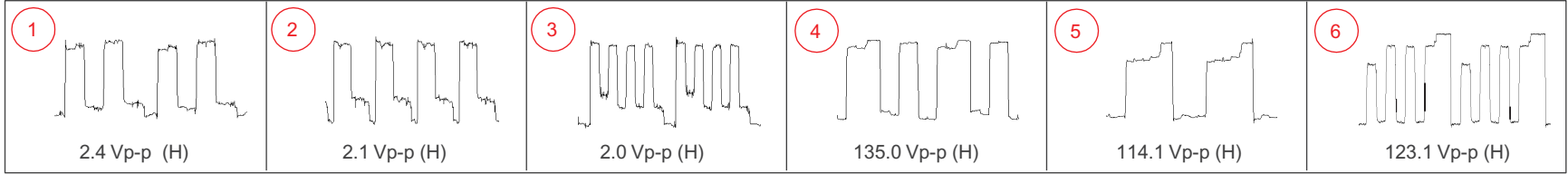
All voltages are in V.

C BOARD IC VOLTAGE LIST

IC9001		IC9002		IC9003	
PIN	VOLT	PIN	VOLT	PIN	VOLT
1	3.5	1	3.5	1	3.5
2	12.0	2	12.0	2	12.0
3	3.5	3	3.5	3	3.5
4	GND	4	GND	4	GND
5	8.7	5	8.6	5	7.8
6	198.5	6	198.5	6	198.5
7	17.9	7	115.0	7	147.0
8	150.0	8	154.0	8	150.0
9	118.2	9	114.0	9	115.0

All voltages are in V.

C BOARD WAVEFORMS



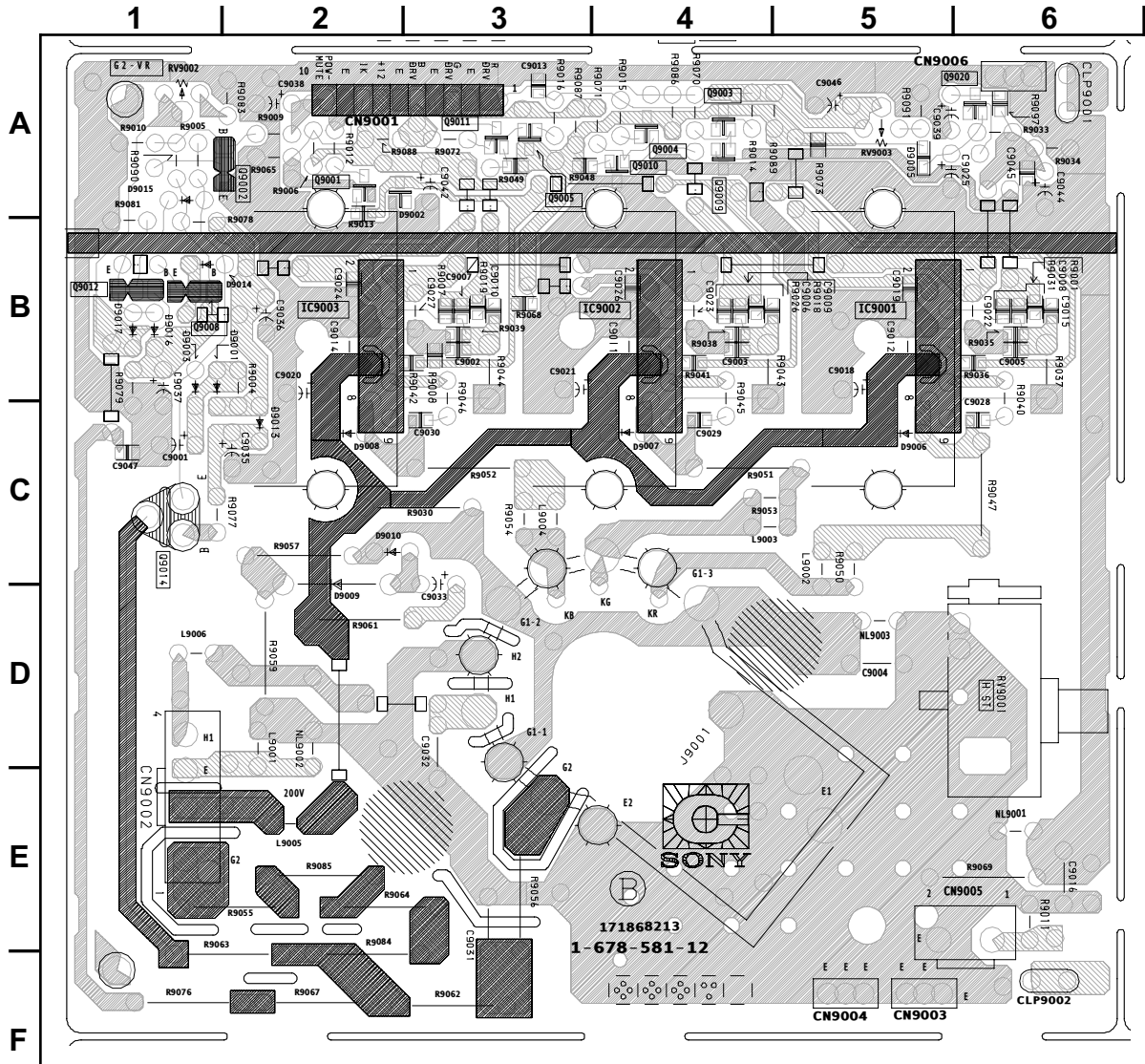


<b>DIODE</b>		D9016	B-6
D9001	B-6	D9017	B-6
D9003	B-6	<b>IC</b>	
D9007	C-3	IC9001	B-2
D9008	C-5	IC9002	B-3
D9009	D-5	IC9003	B-5
D9010	C-5	<b>TRANSISTOR</b>	
D9013	C-5	Q9002	A-5
D9014	B-6	Q9014	C-6
D9015	A-6		





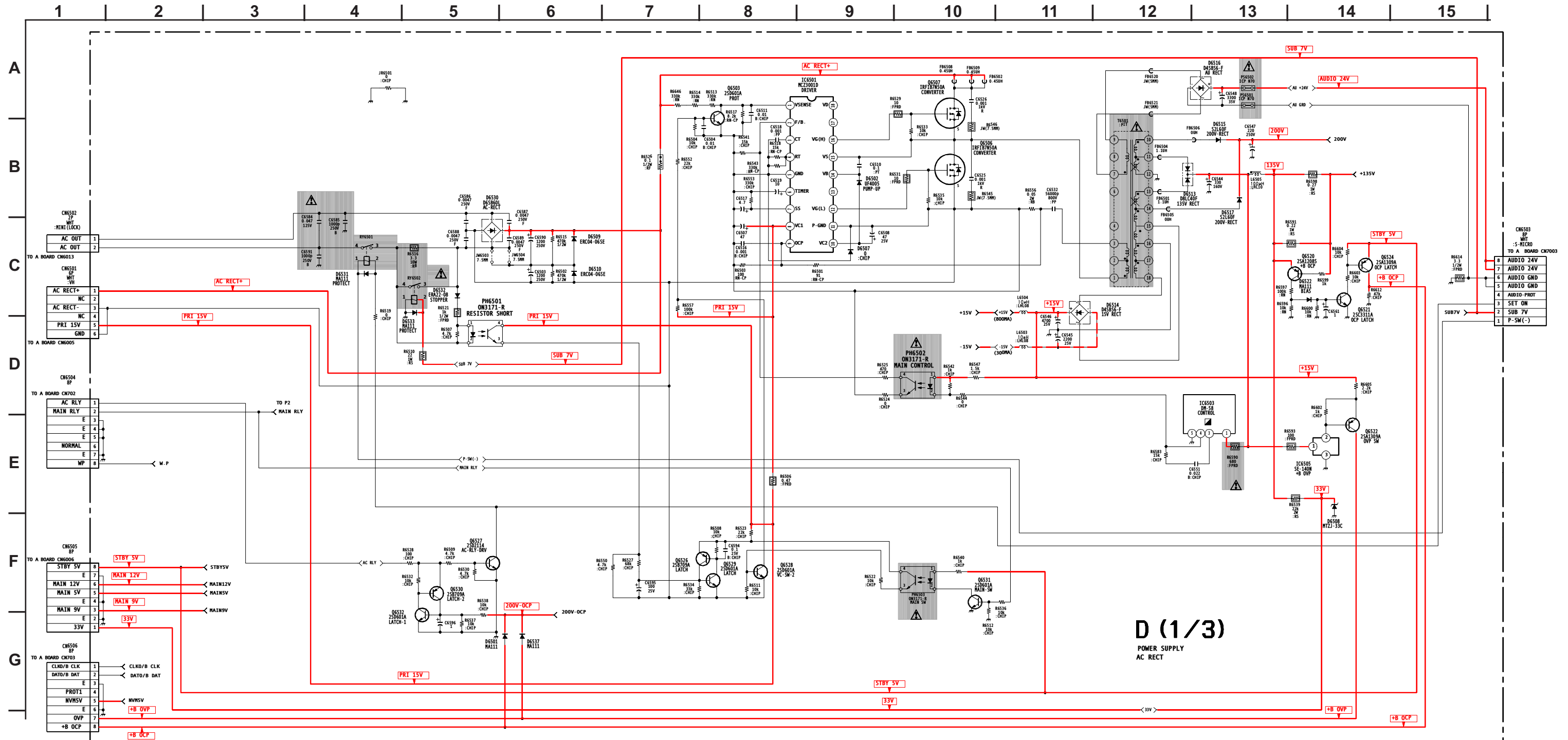
## CONDUCTOR SIDE



## C BOARD LOCATOR LIST (CONDUCTOR SIDE)

DIODE		Q9004	A-4
D9002	A-2	Q9005	A-3
D9005	A-5	Q9008	B-1
D9006	C-5	Q9009	A-4
TRANSISTOR		Q9010	A-4
Q9001	A-2	Q9011	A-3
Q9003	A-4	Q9012	B-1

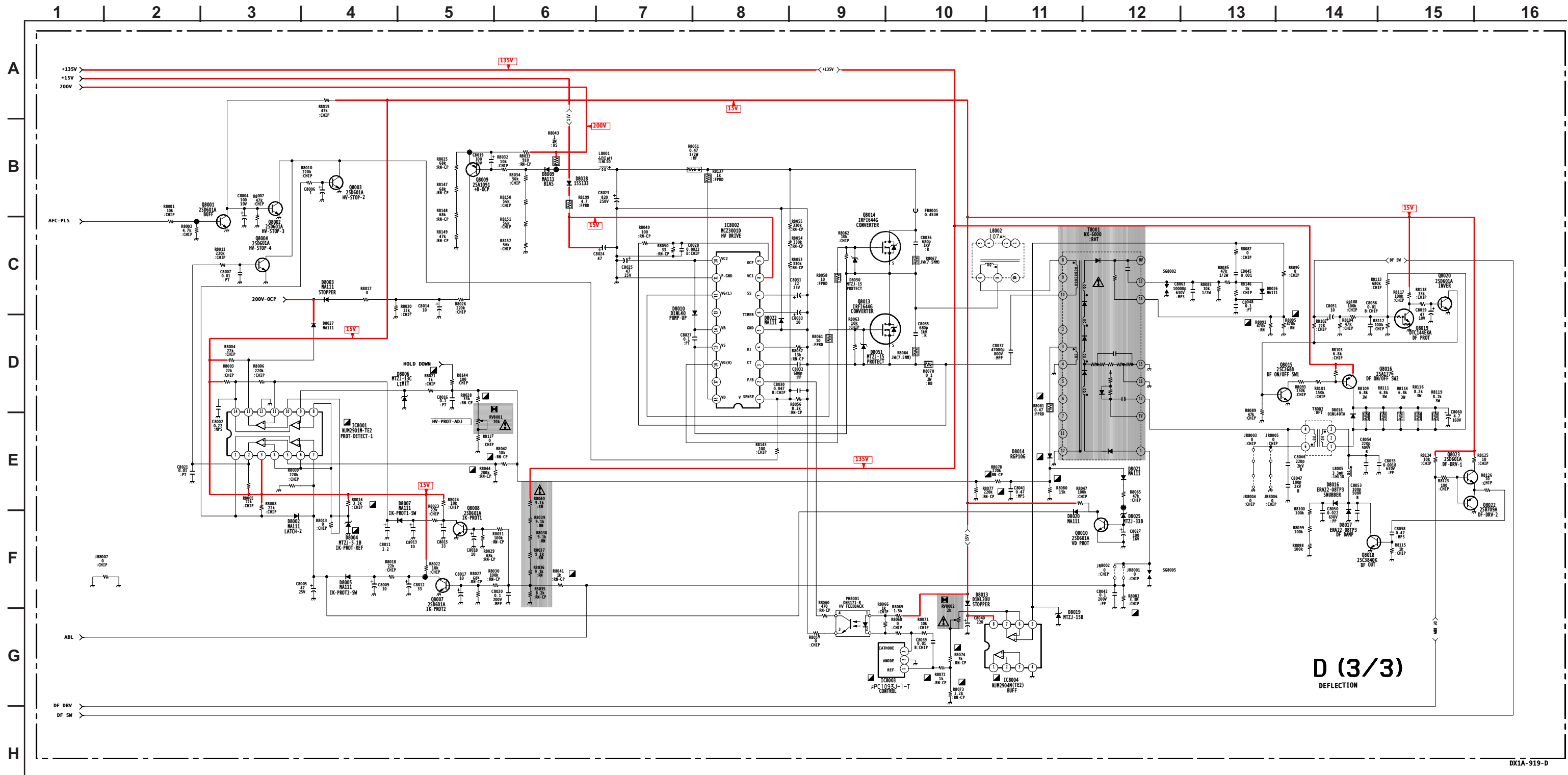
## D BOARD SCHEMATIC DIAGRAM (1 OF 3)







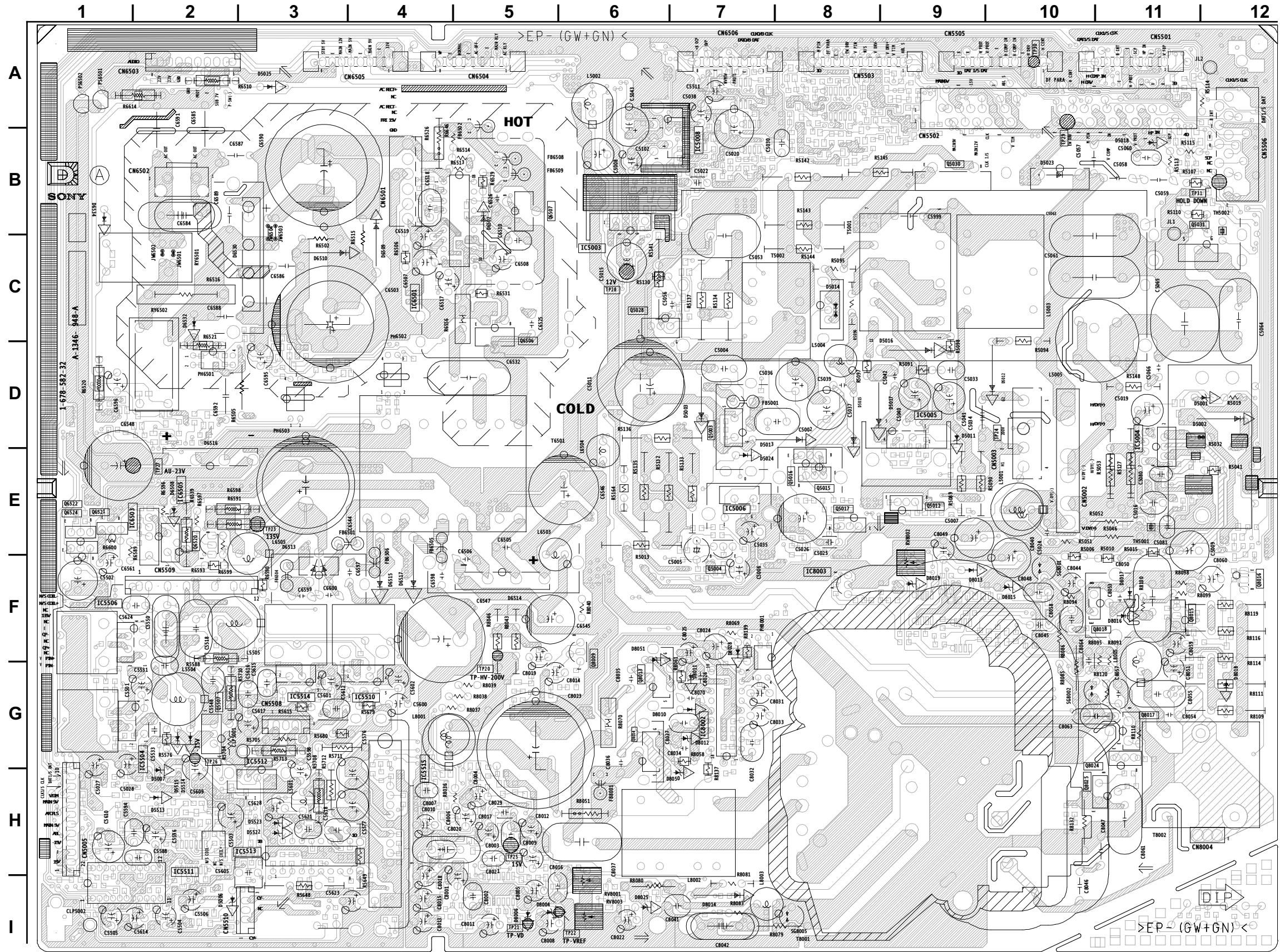
## D BOARD SCHEMATIC DIAGRAM (3 OF 3)





**D** [POWER SUPPLY, AC RECT, H/V DRIVE, H/V DY, DEFLECTION]

**COMPONENT SIDE**



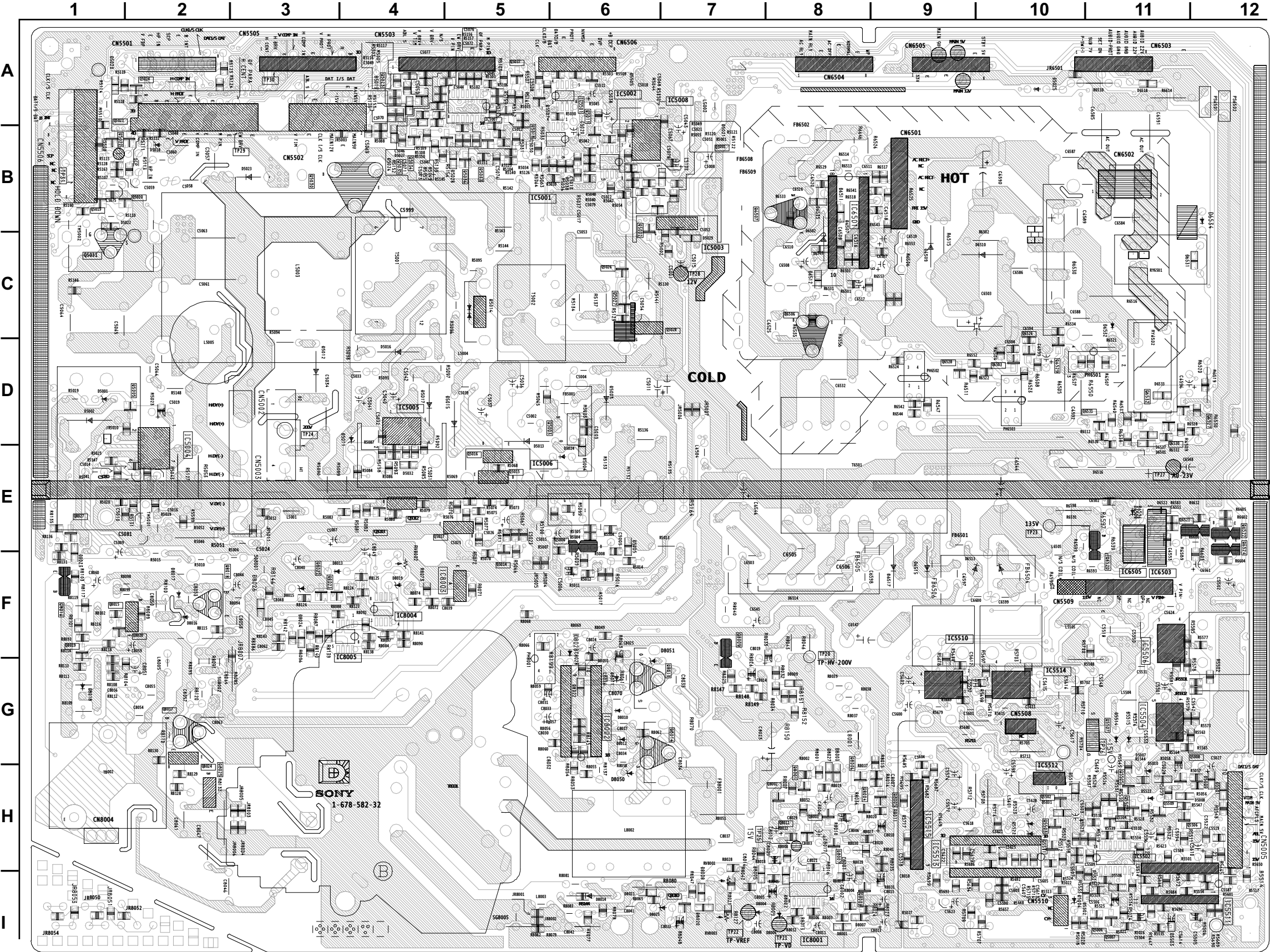
**D BOARD LOCATOR LIST (COMPONENT SIDE)**

DIODE		D8028	F-7
D5001	D-12	D8050	H-6
D5002	D-12	D8051	F-6
D5003	D-7	IC	
D5006	I-2	IC5004	D-11
D5007	H-2	IC5005	D-9
D5011	D-9	IC5006	E-7
D5012	D-10	IC5504	H-2
D5013	D-7	IC5506	F-1
D5014	C-8	IC5510	G-4
D5015	D-8	IC5511	I-2
D5016	C-9	IC5512	H-3
D5017	D-9	IC5513	H-3
D5018	B-11	IC5514	G-3
D5023	B-10	IC5515	H-4
D5024	E-7	IC6501	C-4
D5025	A-3	IC6503	E-2
D5513	H-2	IC6505	E-2
D5514	H-2	IC8002	G-7
D5515	H-2	IC8003	F-8
D5522	H-3	TRANSISTOR	
D5523	H-3	Q5003	D-7
D6502	C-5	Q5004	F-7
D6508	E-2	Q5030	B-9
D6509	C-4	Q5031	B-11
D6510	C-3	Q5507	G-2
D6513	F-3	Q6507	B-5
D6514	G-6	Q6521	E-1
D6515	F-4	Q6522	E-1
D6516	D-2	Q6524	E-1
D6517	F-4	Q8009	G-6
D6532	C-2	Q8013	G-6
D8004	I-5	Q8014	G-6
D8006	I-5	Q8015	F-11
D8017	F-11	Q8018	F-11
D8018	G-12		
D8019	F-9		
D8025	I-6		



**D** [POWER SUPPLY, AC RECT, H/V DRIVE, H/V DY, DEFLECTION]

CONDUCTOR SIDE

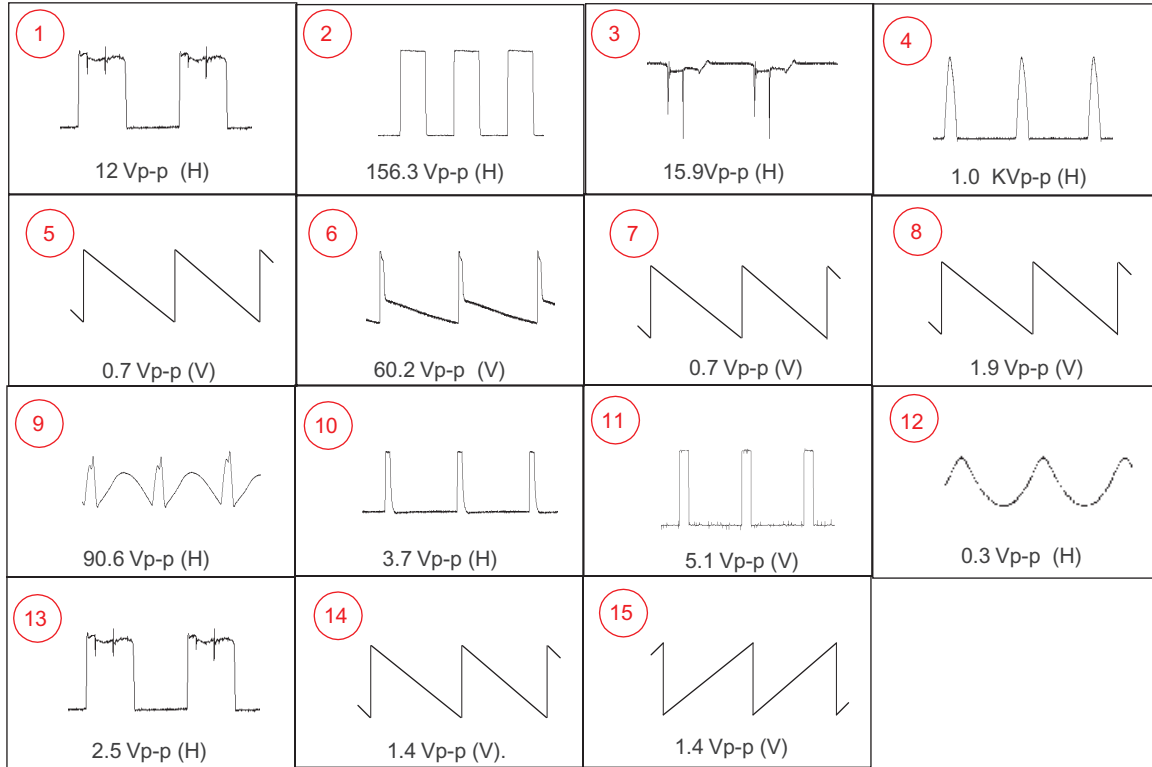


D BOARD LOCATOR LIST (CONDUCTOR SIDE)

DIODE		D8021	I-6	Q5033	B-4
D5004	E-6	D8022	G-6	Q5034	B-4
D5005	F-6	D8026	G-5	Q5035	B-4
D5008	H-12	D8027	G-8	Q5036	B-5
D5009	H-12	IC		Q5037	A-5
D5010	H-11	IC5001	B-5	Q5501	H-10
D5019	B-3	IC5002	A-6	Q5502	H-10
D5021	B-6	IC5003	C-7	Q5503	H-10
D5026	B-4	IC5007	A-5	Q5504	H-11
D5027	B-4	IC5008	A-7	Q5505	H-11
D5028	B-4	IC5501	A-6	Q5506	H-12
D5029	C-7	IC5502	H-11	Q5508	H-11
D5031	H-10	IC8001	I-8	Q5509	H-11
D5032	E-4	IC8004	F-4	Q6503	D-10
D5501	I-12	TRANSISTOR		Q6506	D-7
D5502	I-11	Q5001	B-7	Q6520	F-11
D5503	I-12	Q5002	B-7	Q6526	C-10
D5505	A-6	Q5005	D-2	Q6527	D-11
D5506	H-11	Q5006	I-11	Q6528	D-9
D5507	B-5	Q5007	I-11	Q6529	D-11
D6501	D-11	Q5008	G-12	Q6530	D-11
D6507	B-8	Q5011	A-6	Q6531	D-10
D6522	E-11	Q5012	E-4	Q6532	D-11
D6530	C-10	Q5013	E-4	Q8001	H-8
D6531	C-11	Q5014	E-4	Q8002	H-8
D6533	D-11	Q5015	E-5	Q8003	H-8
D6537	E-11	Q5016	E-5	Q8004	H-8
D8002	I-8	Q5017	E-4	Q8007	H-8
D8003	I-8	Q5018	B-5	Q8008	I-8
D8005	I-8	Q5019	B-1	Q8010	I-7
D8007	I-8	Q5020	B-2	Q8016	F-1
D8009	G-7	Q5021	B-2	Q8019	F-1
D8010	G-6	Q5022	B-2	Q8020	F-2
D8013	F-4	Q5023	A-4	Q8022	F-4
D8014	I-6	Q5026	C-6	Q8023	F-4
D8016	F-2	Q5027	C-6		
D8020	I-7	Q5028	C-7		



## D BOARD WAVEFORMS



## D BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E		B	C	E
Q5001	2.9	12.0	3.3	Q5027	5.2	0.0	5.2	Q6528	0.6	0.0	0.0
Q5002	2.9	GND	3.3	Q5030	132.0	0.0	GND	Q6529	0.0	5.9	0.0
Q5003	127.4	134.1	23.3	Q5033	10.0	1.4	10.5	Q6530	4.7	0.0	4.7
Q5004	132.0	0.0	133.0	Q5034	0.0	1.4	GND	Q6531	0.6	0.0	GND
Q5005	-0.5	15.6	0.1	Q5035	0.0	2.5	GND	Q6532	0.0	4.7	GND
Q5006	-12.0	1.0	-11.9	Q5036	0.1	5.2	GND	Q8001	0.1	0.0	GND
Q5007	0.3	-11.9	0.9	Q5037	3.1	12.1	3.7	Q8002	0.0	1.6	GND
Q5008	11.9	0.0	10.7	Q5501	0.3	3.0	GND	Q8003	0.2	1.6	GND
Q5011	0.1	3.9	GND	Q5502	0.5	5.4	GND	Q8004	0.0	1.6	GND
Q5012	3.7	97.7	3.2	Q5503	0.5	0.3	GND	Q8007	0.6	0.0	GND
Q5013	3.1	GND	3.7	Q5504	0.0	4.0	GND	Q8008	0.6	0.0	GND
Q5014	6.6	12.1	6.1	Q5505	0.0	4.2	GND	Q8009	196.0	0.0	196.0
Q5015	202.8	212.4	203.2	Q5506	0.3	2.3	GND	Q8010	0.6	0.0	GND
Q5016	203.2	212.4	202.6	Q5508	4.0	12.1	4.6	Q8015	0.5	0.0	GND
Q5017	6.5	164.8	6.1	Q5509	4.0	GND	4.6	Q8016	134.5	134.7	135.1
Q5018	0.6	1.9	GND	Q6503	0.0	2.5	0.0	Q8018	-5.5	94.4	GND
Q5019	3.7	12.1	2.9	Q6520	131.0	0.0	132.0	Q8019	3.5	0.0	GND
Q5020	3.7	GND	2.9	Q6521	0.0	2.1	GND	Q8020	0.0	0.5	GND
Q5021	0.4	9.0	0.5	Q6522	15.7	0.0	15.7	Q8022	4.6	GND	4.9
Q5022	0.4	GND	1.1	Q6524	2.1	0.4	4.9	Q8023	4.6	15.5	4.9
Q5023	0.4	3.9	GND	Q6526	5.9	0.0	5.9	All voltages are in V.			
Q5026	5.2	12.1	5.2	Q6527	0.6	0.0	0.0				

	D	G	S		D	G	S
Q5028	5.2	33.5	GND	Q6507	154.4	303.3	150.0
Q5031	2.9	12.6	GND	Q8013	4.6	94.8	0.0
Q5507	5.4	6.9	GND	Q8014	99.0	198.0	93.2
Q6506	4.7	149.2	0.0	All voltages are in V.			

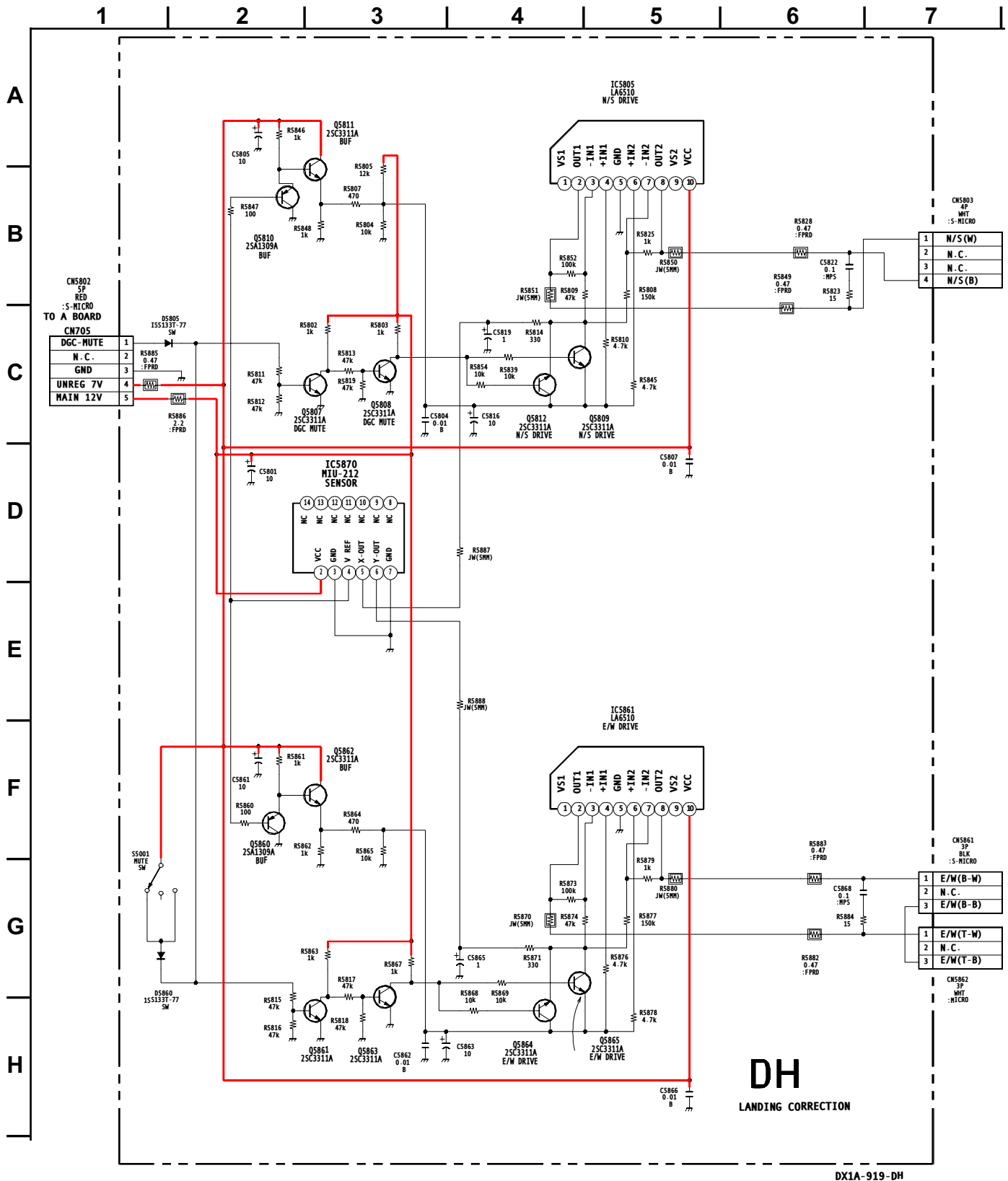
## D BOARD IC VOLTAGE LIST

IC5001		IC5006		IC5502		IC5511		7	N/C	6	0.0	11	0.1		
PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT	8	5.0	7	4.0	12	GND		
1	11.0	I	7.8	1	5.4	1	4.6	9	5.0	8	17.2	13	0.1		
2	11.0	G	GND	2	2.4	2	4.6	10	12.1	9	GND	14	0.1		
3	N/C	O	6.3	3	12.1	3	N/C	11	4.0	10	10.4	IC8002			
4	GND	VC	N/C	4	3.6	4	4.2	12	5.0	11	0.0	PIN	VOLT		
5	4.0	IC5007		5	3.4	5	9.0	13	5.0	12	4.6	1	1.6		
6	4.0	PIN	VOLT	6	3.4	6	3.7	14	0.5	13	N/C	2	1.8		
7	6.6	1	3.1	7	3.9	7	GND	15	1.1	14	163.6	3	2.2		
8	12.1	2	0.6	8	N/C	8	5.4	16	4.6	15	153.5	4	2.5		
IC5002		3	12.1	9	N/C	9	1.9	17	4.6	16	157.6	5	GND		
PIN	VOLT	4	1.5	10	0.0	10	0.3	18	GND	17	N/C	6	0.0		
1	0.1	5	2.3	11	0.0	11	4.4	IC5514		18	N/C	7	4.7		
2	6.0	6	5.5	12	GND	12	6.4	PIN	VOLT	IC6503		8	14.8		
3	3.8	7	3.5	13	3.7	13	N/C	1	0.3	PIN	VOLT	9	0.0		
4	GND	8	0.0	14	N/C	14	8.2	2	0.3	1	134.0	10	10.4		
5	2.3	9	3.0	IC5504		15	1.9	3	-12.0	2	N/C	11	GND		
6	3.7	10	1.4	PIN	VOLT	16	4.0	4	0.7	3	2.5	12	4.5		
7	2.9	11	6.1	1	4.2	17	4.9	5	9.0	4	12.5	13	N/C		
8	12.1	12	GND	2	4.2	18	N/C	IC5515		5	GND	14	108.2		
IC5003		13	2.5	3	GND	19	3.6	PIN	VOLT	IC6505		15	98.3		
PIN	VOLT	14	0.6	4	6.4	20	9.0	1	3.4	PIN	VOLT	16	102.6		
I	15.6	IC5008		5	9.0	21	0.9	2	3.4	1	134.9	17	N/C		
G	GND	PIN	VOLT	IC5506		22	N/C	3	-0.2	2	15.7	18	198.0		
O	12.1	1	9.1	PIN	VOLT	IC5512		4	-15.3	3	GND	IC8003			
IC5004		2	12.0	1	4.3	PIN	VOLT	5	GND	IC8001		PIN	VOLT		
PIN	VOLT	3	GND	2	4.3	I	-15.8	6	12.0	PIN	VOLT	1	2.4		
1	1.2	4	5.0	3	-15.5	G	GND	7	-14.5	1	0.1	2	GND		
2	15.6	5	5.2	4	5.2	O	-12.0	8	2.7	2	0.0	3	11.0		
3	-12.6	IC5501		5	9.0	IC5513		9	GND	3	15.6	IC8004			
4	-14.5	PIN	VOLT	IC5510		PIN	VOLT	IC6501		4	5.0	PIN	VOLT		
5	0.2	1	GND	PIN	VOLT	1	4.5	PIN	VOLT	5	4.3	1	N/C		
6	16.2	2	5.0	1	0.6	2	4.9	1	2.5	6	5.0	2	N/C		
7	1.2	3	5.0	2	0.6	3	4.9	2	1.8	7	0.0	3	N/C		
IC5005		4	GND	3	-11.9	4	4.6	3	2.2	8	5.0	4	GND		
PIN	VOLT	5	4.6	4	2.4	5	5.0	4	2.5	9	4.2	5	7.1		
1	100.0	6	4.6	5	12.1	6	5.0	5	GND	10	5.0	6	7.1		
2	99.7	7	5.0									7	7.1		
3	-95.3	8	5.0											8	15.2
4	100.0														
5	104.6														

All voltages are in V.

All voltages are in V.

## DH BOARD SCHEMATIC DIAGRAM



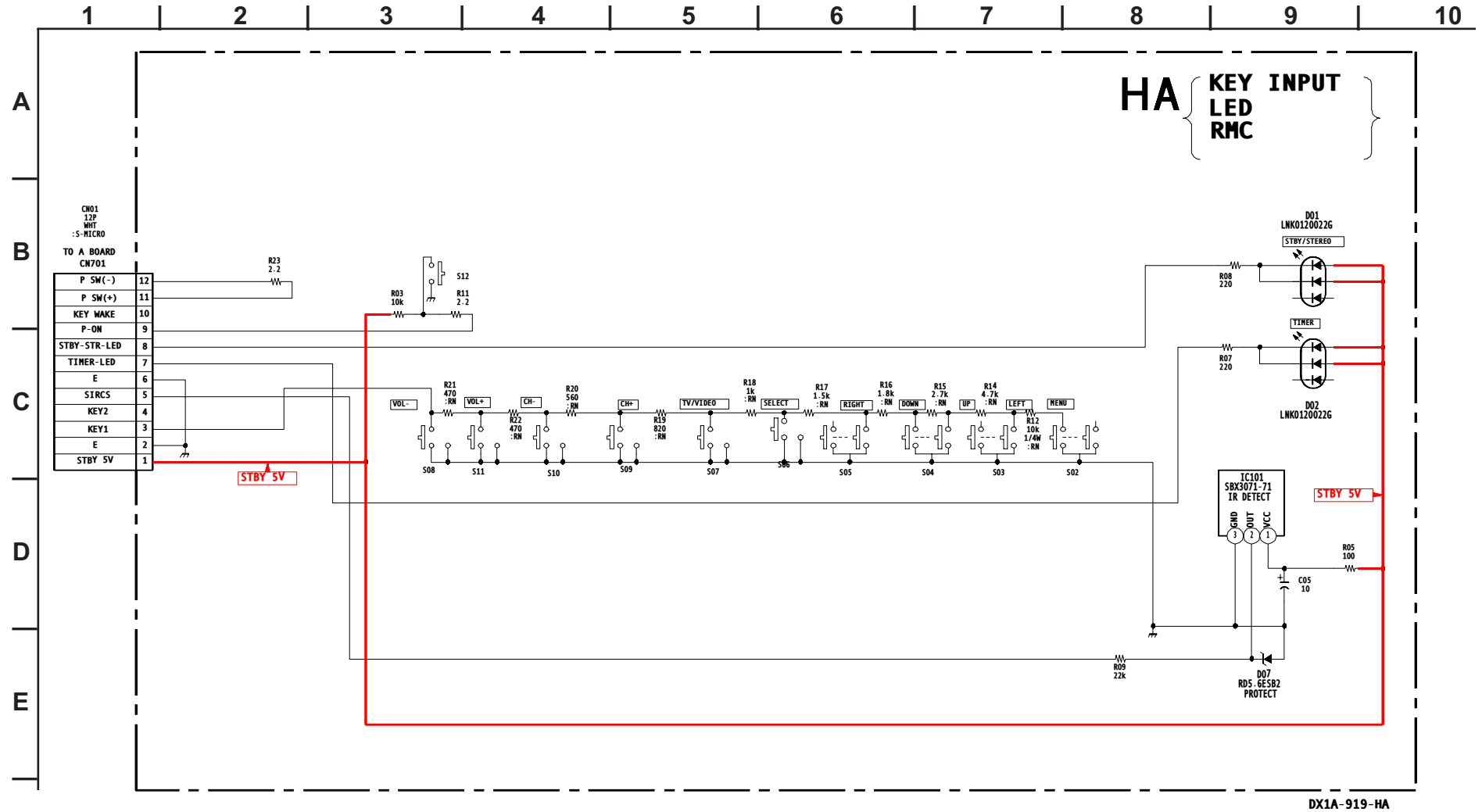


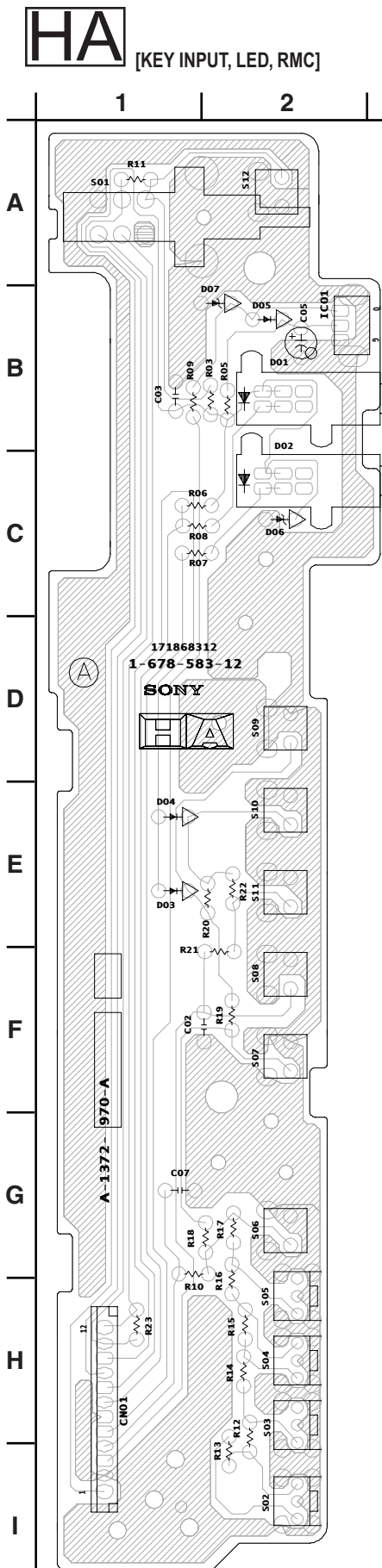
All voltages are in V.

	B	C	E		B	C	E
Q5807	0.7	0.1	GND	Q5860	2.5	GND	3.2
Q5808	0.0	10.6	GND	Q5861	0.7	0.1	GND
Q5809	3.2	2.6	2.6	Q5862	3.2	6.3	2.6
Q5810	2.5	GND	3.2	Q5863	0.0	10.6	GND
Q5811	3.2	6.4	2.5	Q5864	3.6	2.9	2.9
Q5812	3.2	2.5	2.6	Q5865	3.7	3.0	3.0

— 89 —

## HA BOARD SCHEMATIC DIAGRAM





## HA BOARD IC VOLTAGE LIST

IC101	
PIN	VOLT
1	4.9
2	0.0
3	4.3

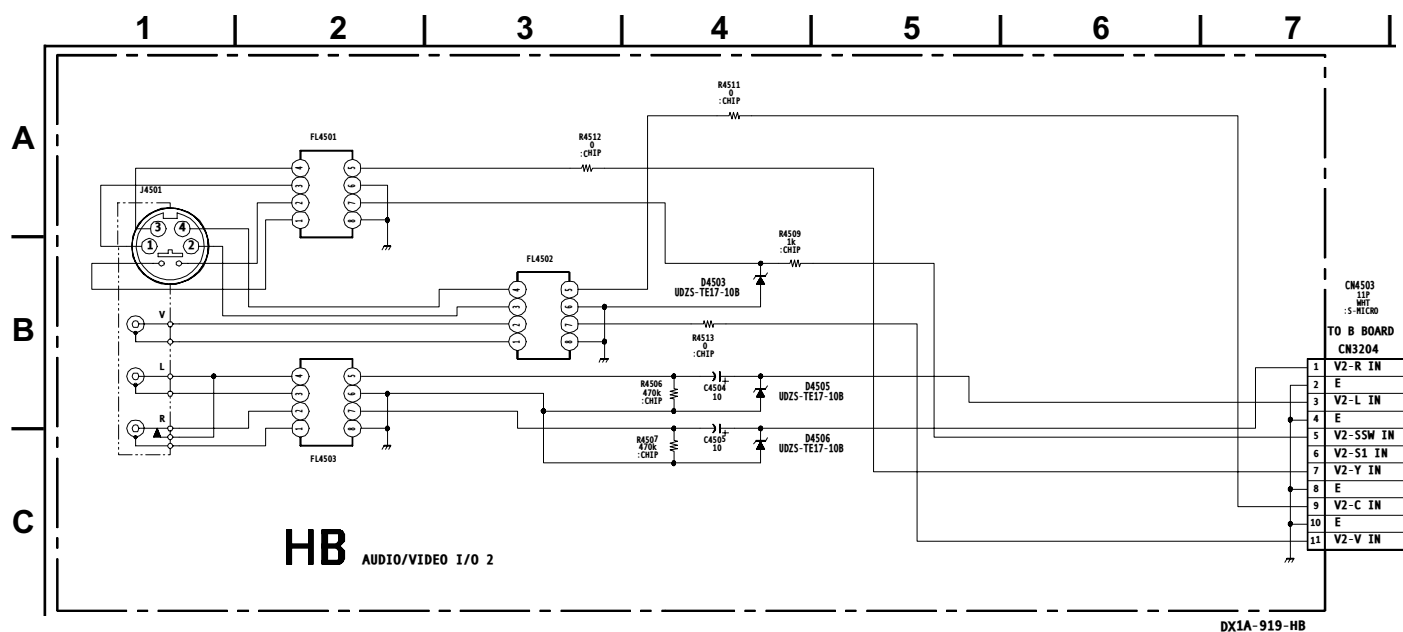
All voltages are in V.

## HA BOARD LOCATOR LIST

DIODE	
D01	B-2
D02	C-2
D07	B-2
IC	
IC01	B-3



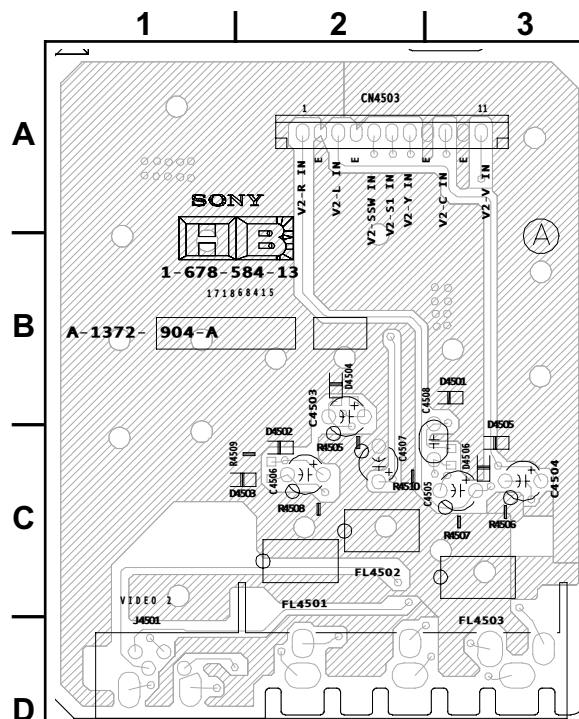
## HB BOARD SCHEMATIC DIAGRAM



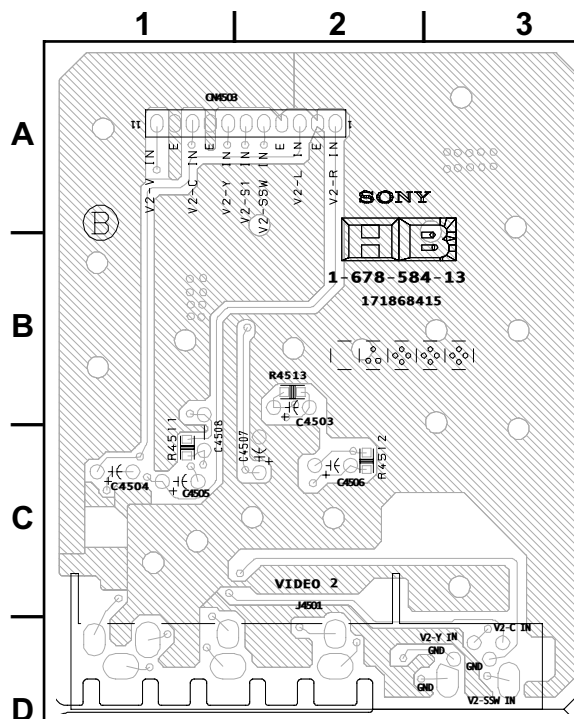
HB

[AUDIO/VIDEO I/O 2]

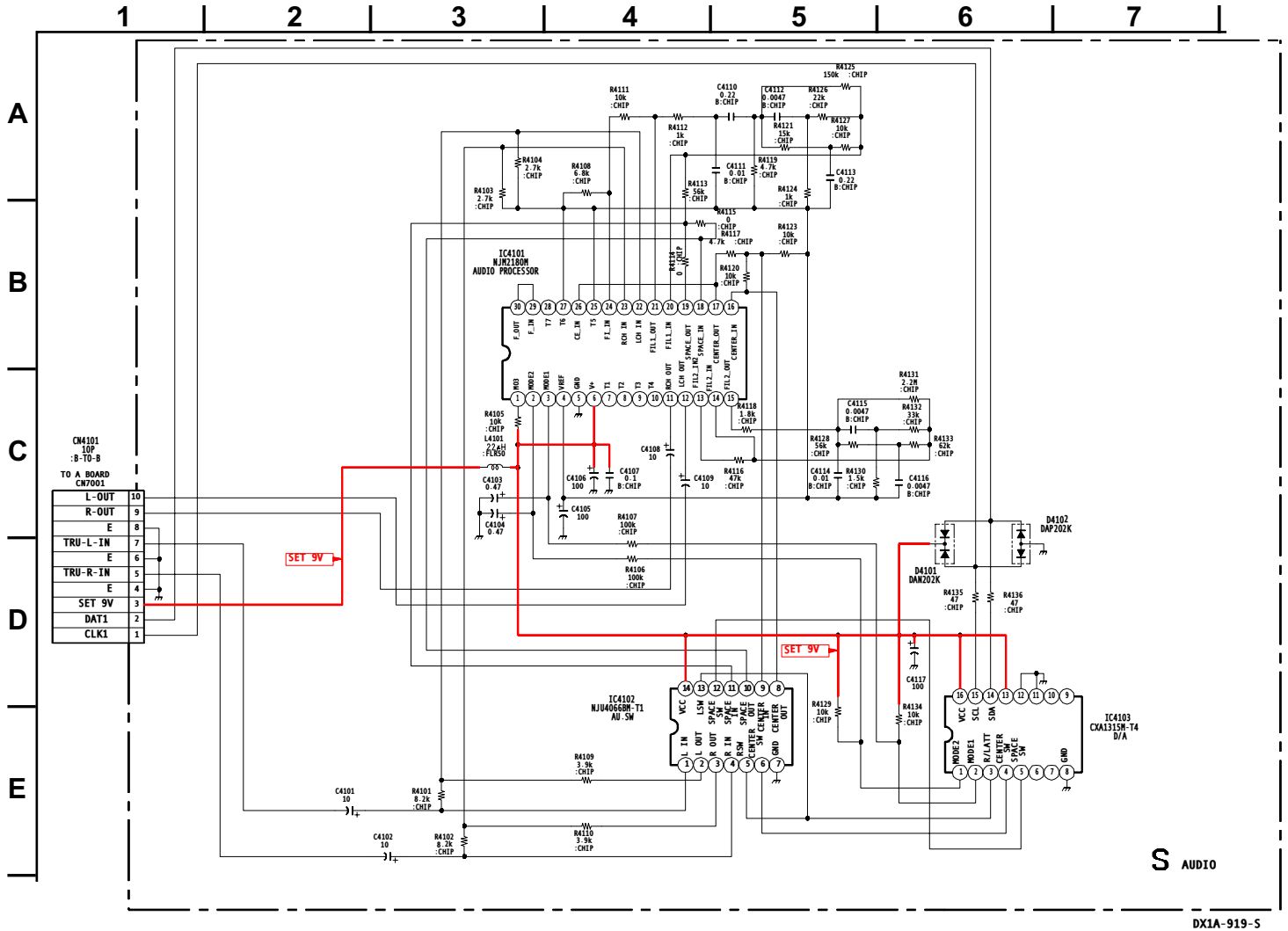
## COMPONENT SIDE



## CONDUCTOR SIDE



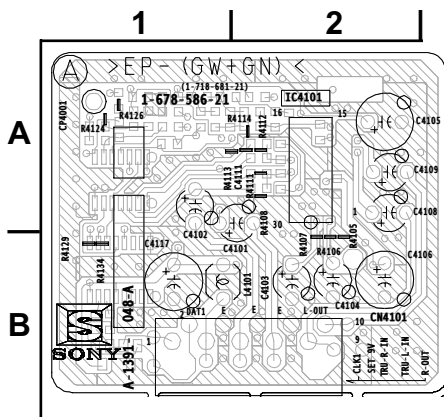
## S BOARD SCHEMATIC DIAGRAM



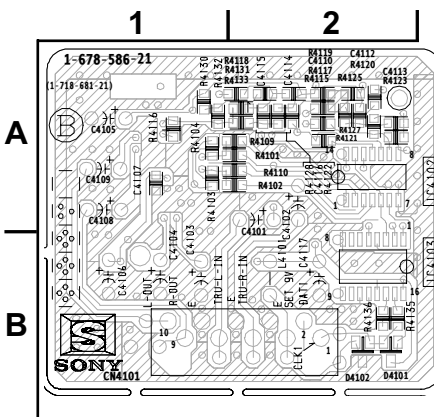
DX1A-919-5



## COMPONENT SIDE



## CONDUCTOR SIDE

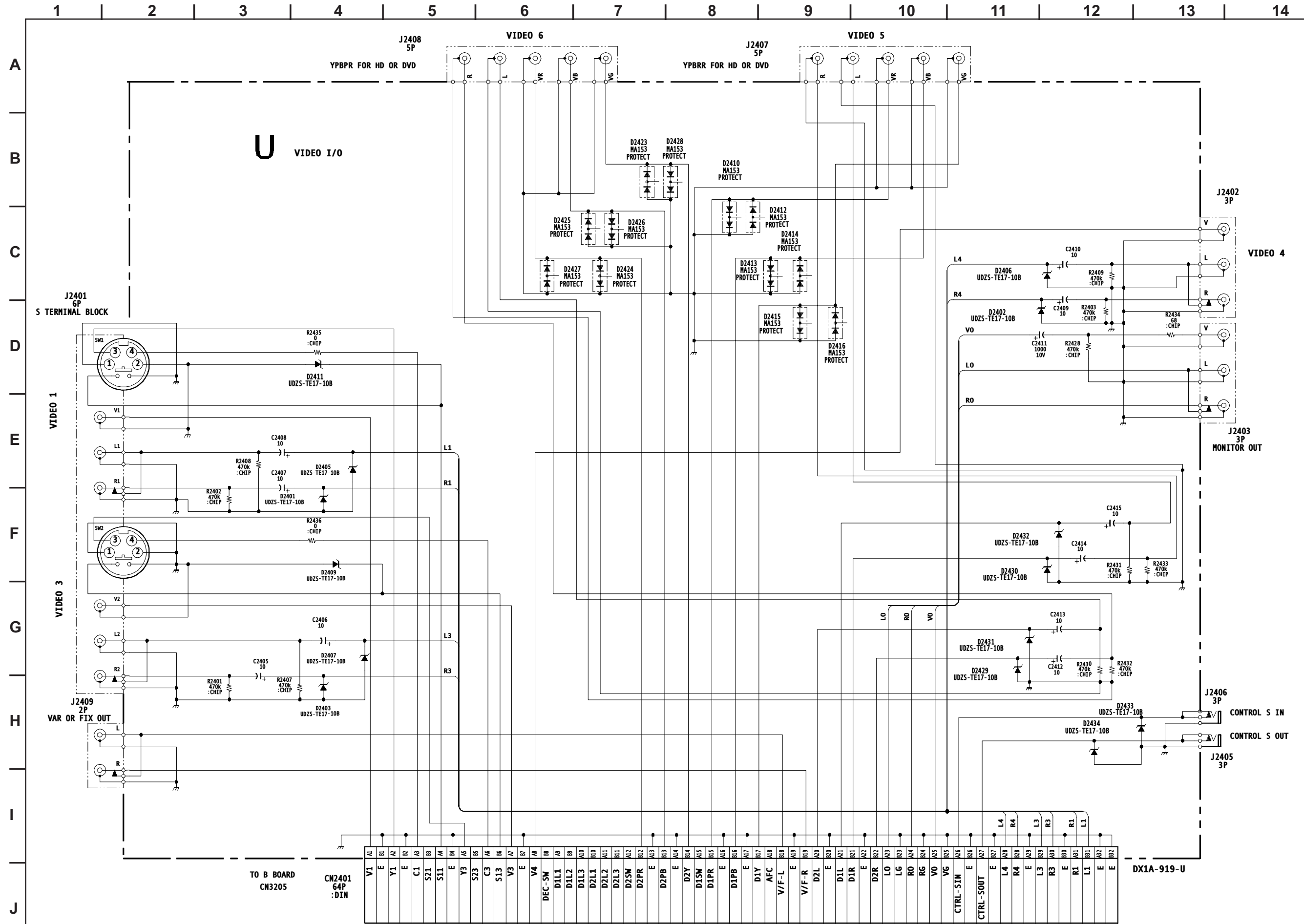


## S BOARD IC VOLTAGE LIST

IC4101		22	4.5	13	8.6
PIN	VOLT	23	4.5	14	9.0
1	8.4	24	4.5	IC4103	
2	0.1	25	4.5	PIN	VOLT
3	0.1	26	4.5	1	0.1
4	4.5	27	4.5	2	0.1
5	GND	28	N/C	3	8.6
6	9.0	29	4.5	4	0.3
7	N/C	30	4.5	5	0.3
8	N/C	IC4102		6	N/C
9	N/C	PIN	VOLT	7	N/C
10	N/C	1	4.5	8	GND
11	4.5	2	4.5	9	N/C
12	4.5	3	4.5	10	N/C
13	4.5	4	4.5	11	GND
14	4.5	5	8.6	12	GND
15	4.5	6	0.3	13	9.0
16	4.5	7	GND	14	4.5
17	4.5	8	4.5	15	4.5
18	4.5	9	4.5	16	9.0
19	4.5	10	4.5	All voltages are in V.	
20	4.5	11	4.5		
21	4.5	12	0.3		

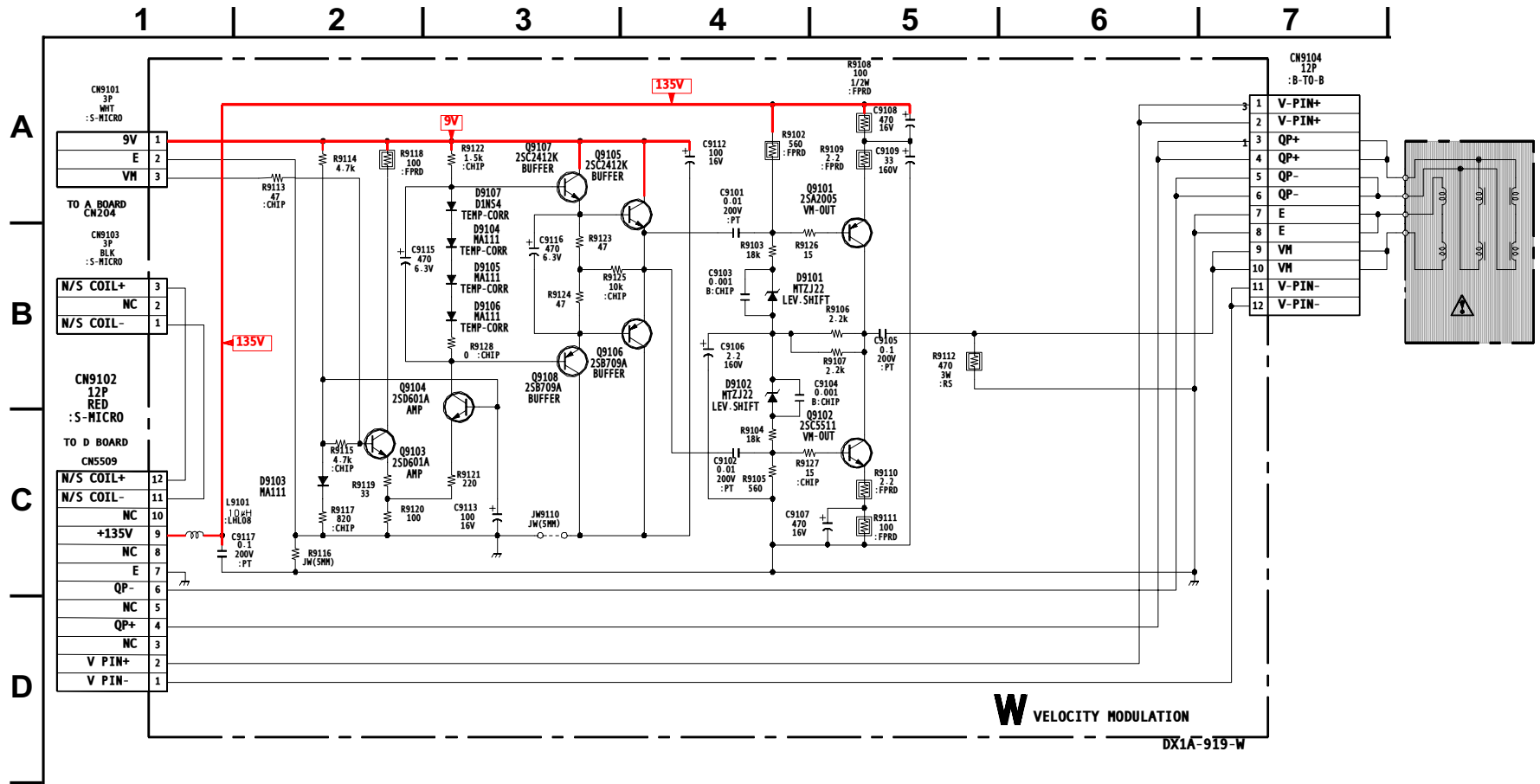
# U BOARD SCHEMATIC DIAGRAM

KV-40XBR700



DIODE	
D2401	D-5
D2402	D-4
D2403	D-5
D2405	D-5
D2406	D-4
D2407	D-5
D2409	A-5
D2410	B-2
D2411	A-5
D2412	B-2
D2413	B-2
D2414	B-2
D2415	A-2
D2416	A-2
D2423	A-1
D2424	B-2
D2425	B-2
D2426	B-2
D2427	B-2
D2428	A-2
D2429	D-2
D2430	D-3
D2431	D-2
D2432	D-3
D2433	D-2
D2434	D-1

## W BOARD SCHEMATIC DIAGRAM



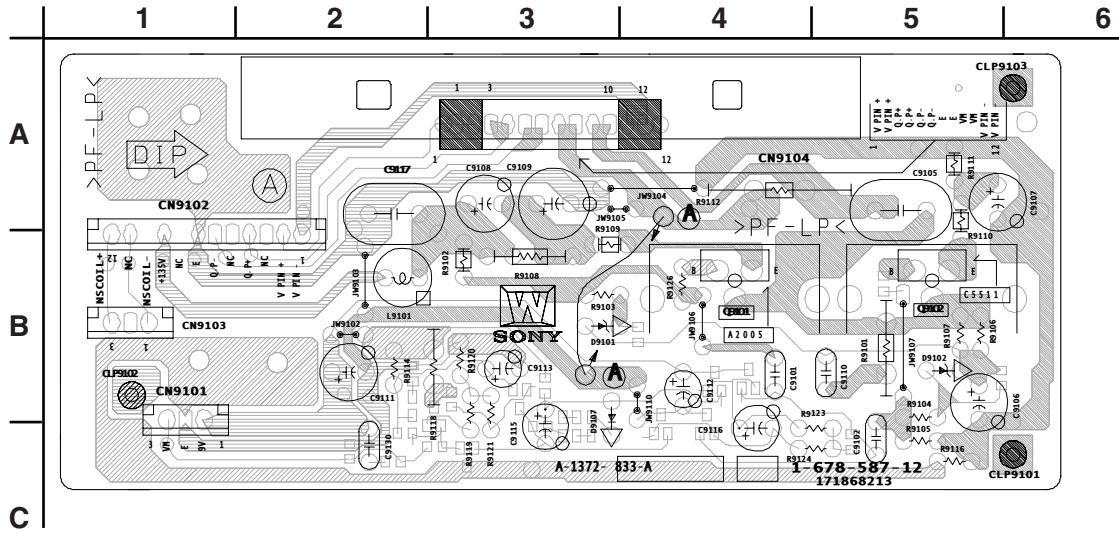
## W BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9101	133.8	67.5	134.3
Q9102	1.3	67.5	0.8
Q9103	1.7	8.2	1.1
Q9104	1.9	4.3	1.2
Q9105	5.8	9.0	5.4
Q9106	4.1	GND	4.7
Q9107	6.5	9.0	5.8
Q9108	4.3	GND	5.0

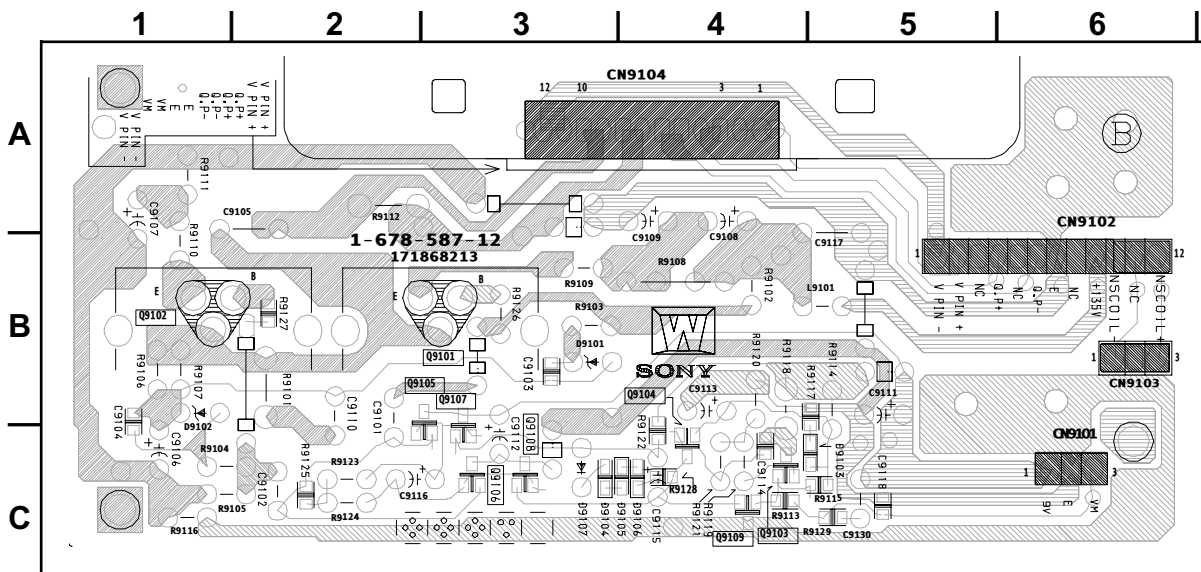
All voltages are in V.



[VELOCITY MODULATION]

**COMPONENT SIDE****W BOARD LOCATOR LIST (COMPONENT SIDE)**

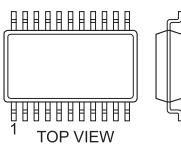
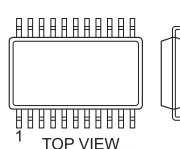
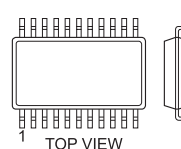
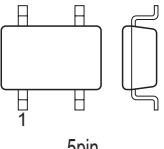
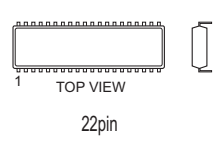
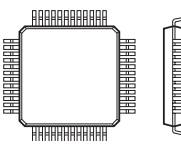
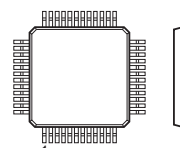
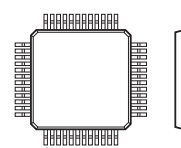
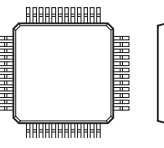
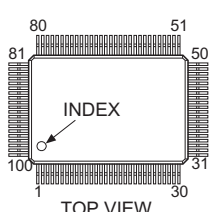
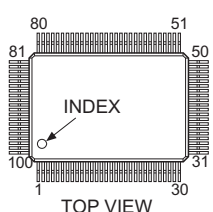
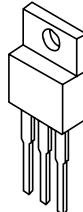
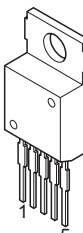
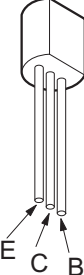

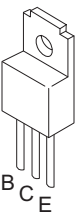
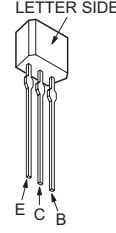
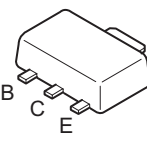
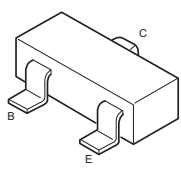
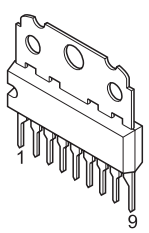
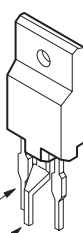
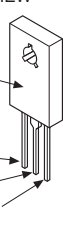
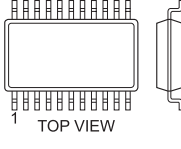
DIODE		TRANSISTOR	
D9101	B-4	Q9101	B-4
D9102	B-6	Q9102	B-6
D9107	C-4		

**CONDUCTOR SIDE****W BOARD LOCATOR LIST (CONDUCTOR SIDE)**

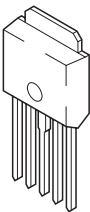
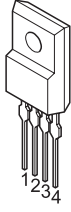
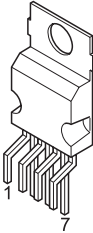
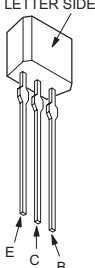
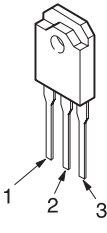
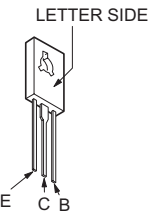
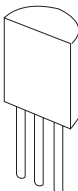
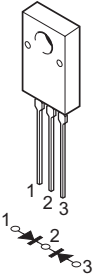
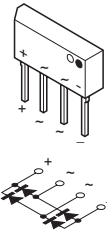
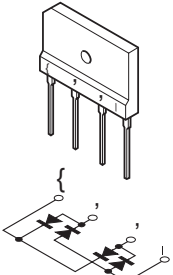
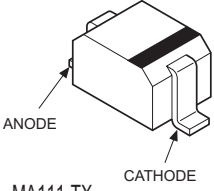
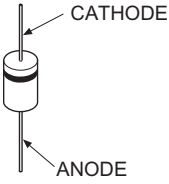
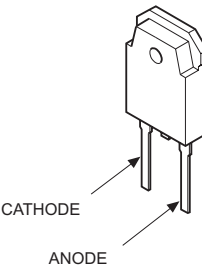
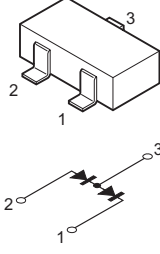
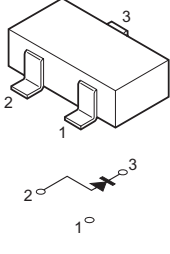
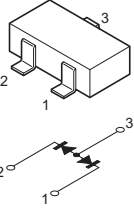
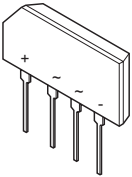
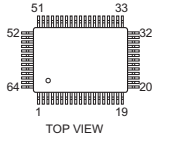
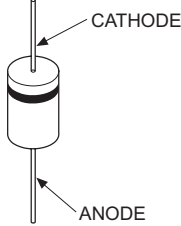
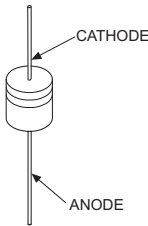
DIODE		TRANSISTOR	
D9106	C-3	Q9105	B-2
D9103	B-4	Q9106	C-3
D9104	C-3	Q9103	C-4
D9105	C-3	Q9104	B-4
		Q9107	B-3
		Q9108	B-3



## 5-4. SEMICONDUCTORS (1 OF 2)

 <p>14pin</p> <p>M52055FP TLC2932IPW TLC2933IPWR-12</p>	 <p>16pin</p> <p>CXD2085M-T4 SN74LV4053ANSR</p>	 <p>32pin</p> <p>BH3868AFS-E2</p>	 <p>5pin</p> <p>PST9120NL PST9145NL TC7SET08FU(TE85L)</p>	 <p>22pin</p> <p>CXA2026AS</p>
 <p>32pin</p> <p>CXD2073Q-T4</p>	 <p>48pin</p> <p>CXA2103Q CXA2150Q</p>	 <p>64pin</p> <p>TLC5733AIPM</p>	 <p>240pin</p> <p>CXD9509AQ</p>	 <p>TOP VIEW</p> <p>CXA2151Q</p>
 <p>TOP VIEW</p> <p>M306V2ME-153FP</p>	 <p>NJM79M12FA</p>	 <p>LA6500-FA</p>	 <p>E C B</p> <p>2SA1208S-TP 2SA10910-TPE</p>	 <p>B C E</p> <p>IRF614 IRFI644-G-LF36 IRFI9630GS</p>
 <p>B C E</p> <p>2SA2005 2SC5511</p>	 <p>LETTER SIDE</p> <p>E C B</p> <p>2SC3311A-QRSTA</p>	 <p>B C E</p> <p>2SK2036(TE85L)</p>	 <p>B C E</p> <p>DTA114EKA-T146 DTC144EKA-T146 2SA1226-T1E4 2SD601A-QRS-TX 2SB709A-QRS-TX 2SC2412K-T-146-QR 2SD2114KT146</p>	
 <p>1 9</p> <p>TDA6111Q/N4</p>	 <p>B C E</p> <p>2SC4632LS-CB7</p>	 <p>MARKING SIDE VIEW</p> <p>CATHODE ANODE CATHODE</p> <p>D5LC20U</p>	 <p>TOP VIEW</p> <p>8pin</p> <p>NJM2901M-TE2 NJM2903M-TE2 NJM2904M-TE2 NJM4558E(TE2) TC7WU04FU(TE12R)</p>	

# SEMICONDUCTORS (2 OF 2)

 <p>PQ07VZ012P</p>	 <p>PQ09RD21 PQ05RF21 PQ12RF21 PQ30RV21</p>	 <p>STV9379</p>	 <p>LETTER SIDE</p> <p>E C B</p> <p>2SA1776TV2Q 2SA1309A-QRSTA</p>	 <p>1 2 3</p> <p>2SC3997S-SONY</p>
 <p>LETTER SIDE</p> <p>E C B</p> <p>2SC2688-LK 2SC3840K</p>	 <p>UPC1093J</p>	 <p>1 2 3</p> <p>D5SC4M D8LC40F</p>	 <p>S1VB20</p>	 <p>D1NL40-TA2 D6SB60L</p>
 <p>ANODE</p> <p>CATHODE</p> <p>MA111-TX MA113-TX UDZSTE-1710B UDZSTE-176.8B UDZSTE-17-12</p>	 <p>CATHODE</p> <p>ANODE</p> <p>1SS133T-77 D1NL20U-TR ERC91-02E</p>	 <p>CATHODE</p> <p>ANODE</p> <p>PG124S15</p>	 <p>MA153-TX</p>	 <p>MA3091-TX</p>
 <p>DAN202K-T-146</p>	 <p>D4SBS6-F</p>	 <p>TOP VIEW</p> <p>CXA2069Q CXP85840A-039Q</p>	 <p>CATHODE</p> <p>ANODE</p> <p>D1NL20U-TA2 ERA22-08TP3 ERC04-06SE GP08DPKG23 HSS83TD HZU11B1TRF RGP02-20EL-6394 MTZJ-77-22B</p>	
			 <p>CATHODE</p> <p>ANODE</p> <p>D1NS4-TA2 MTZJ-T-77-15 MTZJ-T-77-15B MTZJ-T-77-33B MTZJ-T-77-10 MTZJ-T-77-12 MTZJ-T-77-13C MTZJ-T-77-22 MTZJ-T-77-3.9B MTZJ-T-77-33C MTZJ-T-77-4.7B</p>	

## SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

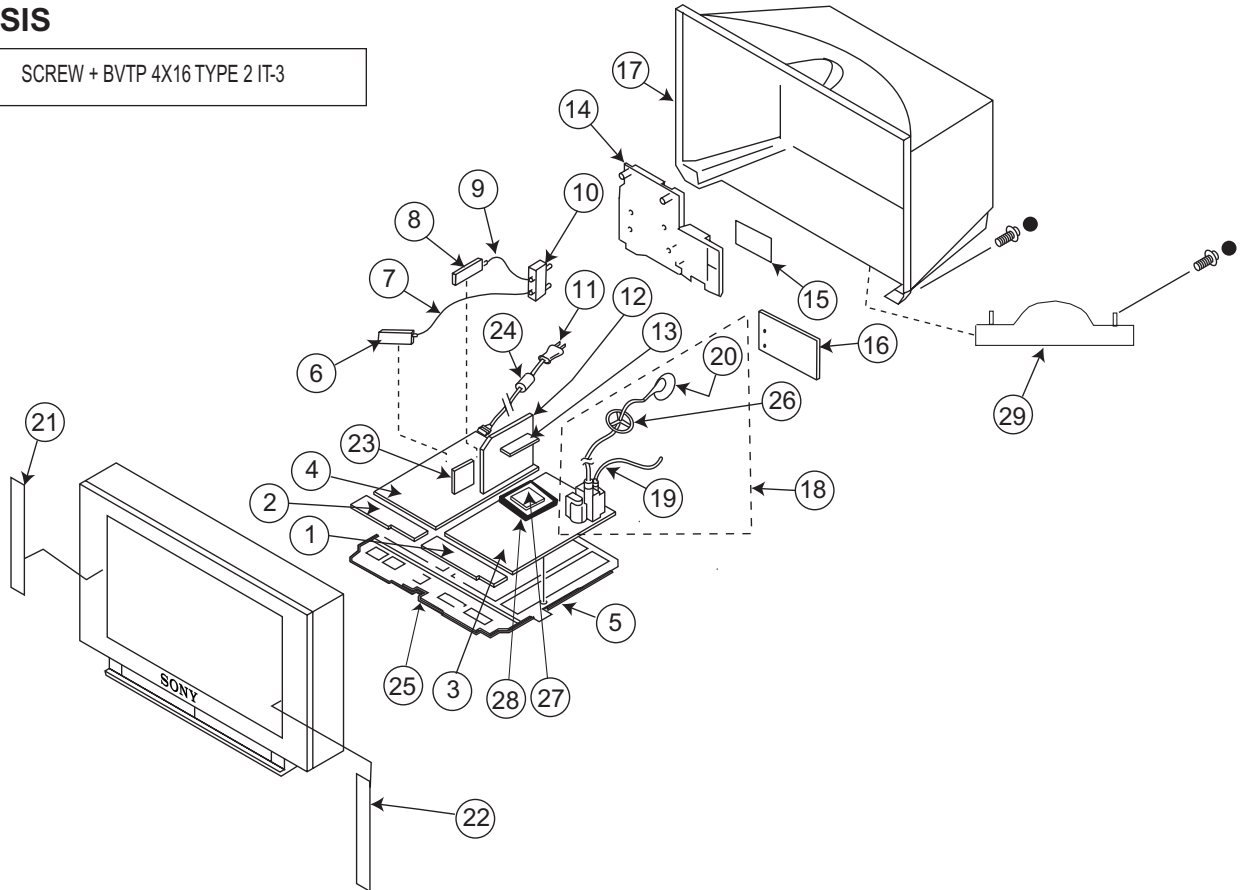
\* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-1. CHASSIS

● 7-685-663-79 SCREW + BVTP 4X16 TYPE 2 IT-3



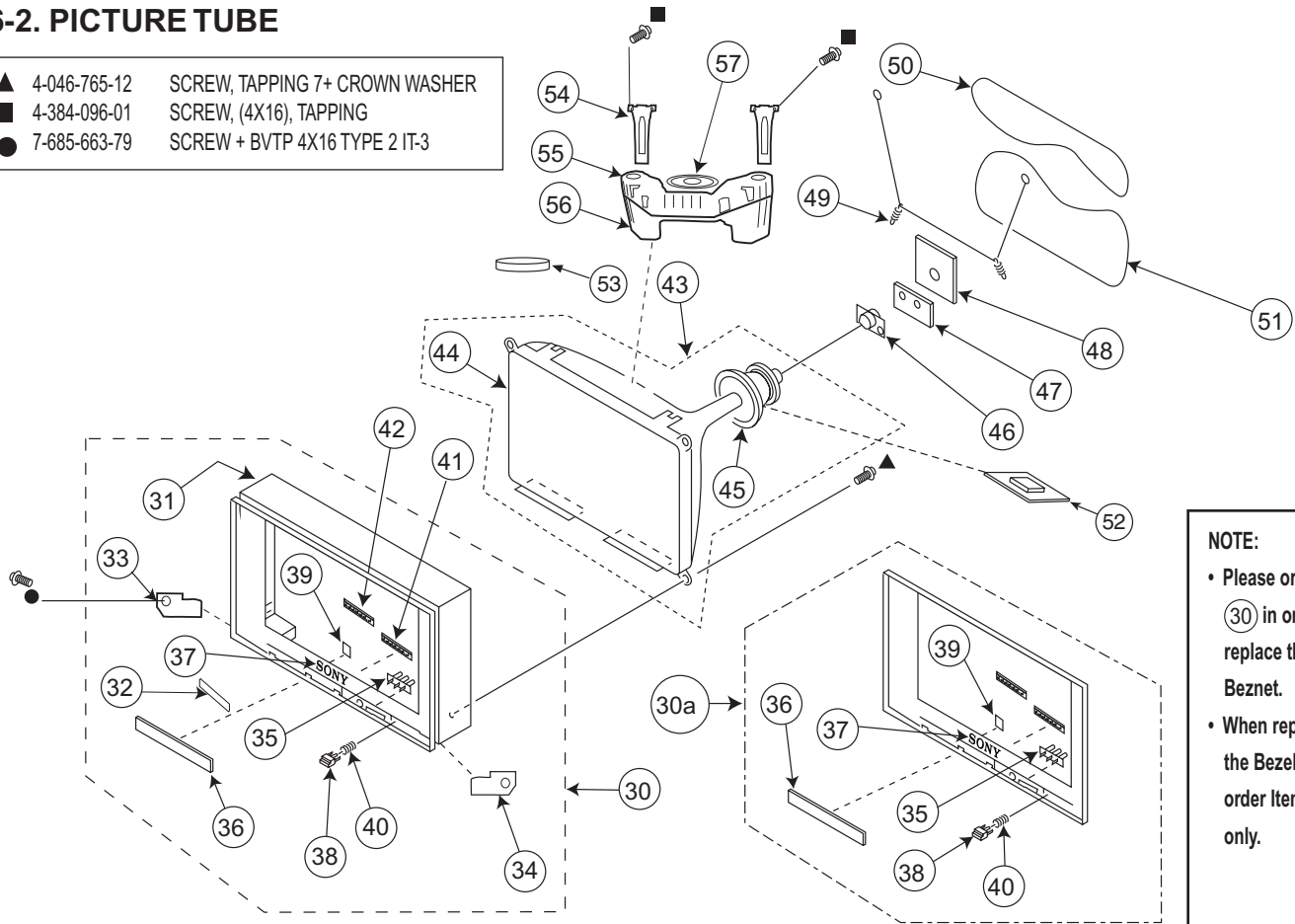
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
* 1	A-1377-021-A	HA MOUNTED PC BOARD	15	4-077-820-01	LABEL, TERMINAL	
* 2	A-1372-904-A	HB (COM) MOUNTED PC BOARD	* 16	A-1373-817-A	U (COM) MOUNTED PC BOARD	
* 3	A-1348-122-A	D COMPLETE PC BOARD	17	4-083-306-01	COVER, REAR	
The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (See 19-20).			⚠ 18	1-453-350-21	FBT ASSY NX-6000/J1C4	[19-20]
			⚠ 19	1-900-805-19	FOCUS LEAD	
* 4	A-1299-560-A	A COMPLETE PC BOARD	⚠ 20	1-251-715-32	HV CAP ASSY	
* 5	4-075-828-01	BRACKET, MAIN	21	1-544-953-11	SPEAKER (LEFT)	
6	8-598-501-30	TUNER, FSS BTF-FA402	22	1-544-953-21	SPEAKER (RIGHT)	
* 7	1-555-400-00	CABLE, PIN	* 23	A-1391-048-A	S MOUNTED PC BOARD	
8	8-598-542-20	TUNER, FSS BTF-WA412	24	1-500-386-11	FILTER, CLAMP (FERRITE CORE)	
* 9	1-557-009-31	CABLE, P-P	* 25	4-083-314-01	BRACKET, H	
⚠ 10	1-771-787-11	SWITCH, RF ANTENNA	26	4-084-918-01	RING, WISILL	
⚠ 11	1-790-316-21	CORD, AC POWER(WITH CONNECTOR)	* 27	A-1333-142-A	DH MOUNTED PC BOARD	
* 12	A-1136-200-A	B COMPLETE PC BOARD	* 28	4-084-013-01	BRACKET, DH	
* 13	A-1136-117-A	BC COMPLETE PC BOARD	29	4-083-308-01	FOOT, RC	
* 14	4-075-829-01	BRACKET, U				
The label associated with the U Bracket is not included and must be ordered separately (See 15).						

**NOTE:** The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 6-2. PICTURE TUBE

- ▲ 4-046-765-12 SCREW, TAPPING 7+ CROWN WASHER
- 4-384-096-01 SCREW, (4X16), TAPPING
- 7-685-663-79 SCREW + BVTP 4X16 TYPE 2 IT-3



**NOTE:**

- Please order Item (30) in order to replace the entire Bezelnet.
- When replacing only the Bezel, please order Item (30a) only.

REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION
30	X-4039-427-1	BEZNET ASSY	[31-40]	* 47	A-1372-833-A	W MOUNTED PC BOARD
30a	X-4039-428-1	BEZEL ASSY	[35-40]	* 48	A-1332-075-A	C MOUNTED PC BOARD
31	4-083-297-01	CABINET		49	4-082-641-01	SPRING, 45MM
32	4-083-484-01	LABEL, DOOR		⚠ 50	1-424-865-11	COIL, DEGAUSSING [TOP]
* 33	4-083-304-01	FOOT, CABINET (L)		⚠ 51	1-424-865-21	COIL, DEGAUSSING [BOTTOM]
* 34	4-083-305-01	FOOT, CABINET (R)				
35	4-083-299-01	GUIDE, LED		52	1-424-866-11	COIL, LANDING CORRECTION
36	4-083-298-11	DOOR		53	4-084-246-01	CUSHION, 20MM X 80MM
37	3-704-179-31	EMBLEM (NO.9), SONY		54	X-4039-429-1	HOLDER ASSY, SPEAKER
38	4-083-300-01	BUTTON, POWER		* 55	4-083-309-01	BOX, SPEAKER (TOP)
* 39	4-084-857-01	CUSHION, DOOR		* 56	4-083-310-01	BOX, SPEAKER (BOTTOM)
40	4-083-303-01	SPRING, METAL		57	1-544-952-11	SPEAKER
41	4-083-301-01	BUTTON, MULTI				
42	4-083-302-01	BUTTON, MENU				
⚠ 43	8-734-048-06	ITC 42RSN-C1	[44-45]			
⚠ 44	8-735-095-05	CRT 42RSN				
⚠ 45	8-451-525-11	DY Y42RSC-M				
⚠ 46	8-453-009-21	NA325-M2 (NECK ASSEMBLY)				

## SECTION 7: ELECTRICAL PARTS LIST

NOTE: The components identified by shading and  $\triangle$  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components in this manual identified by the following symbol:  $\boxtimes$  indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation for each set.

Should replacement be required for one of these components, replace only with the value originally used.

\* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

## RESISTORS

- All resistors are in ohms
- F : nonflammable
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

BC

When ordering parts by reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
* <div>BC</div>	A-1136-117-A	BC COMPLETE PC BOARD				C3534	1-126-960-11	ELECT	1μF	20%	50V
	CAPACITOR					C3535	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3500	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3536	1-126-960-11	ELECT	1μF	20%	50V
	C3501	1-163-231-11	CERAMIC CHIP	15pF	5% 50V	C3537	1-126-964-11	ELECT	10μF	20%	50V
	C3502	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3538	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3504	1-163-102-00	CERAMIC CHIP	24pF	5% 50V	C3539	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3505	1-163-102-00	CERAMIC CHIP	24pF	5% 50V	C3541	1-163-106-00	CERAMIC CHIP	36pF	5%	50V
	C3506	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3542	1-126-964-11	ELECT	10μF	20%	50V
	C3507	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3543	1-164-505-11	CERAMIC CHIP	2.2μF		16V
	C3509	1-163-038-91	CERAMIC CHIP	0.1μF	25V	C3546	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
	C3510	1-163-131-00	CERAMIC CHIP	390pF	5% 50V	C3547	1-126-935-11	ELECT	470μF	20%	16V
	C3511	1-163-038-91	CERAMIC CHIP	0.1μF	25V	C3548	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
	C3512	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3549	1-126-947-11	ELECT	47μF	20%	16V
	C3513	1-216-295-91	SHORT			C3550	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3514	1-163-031-91	CERAMIC CHIP	0.01μF	50V	C3551	1-126-947-11	ELECT	47μF	20%	16V
	C3515	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3552	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3516	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3553	1-163-031-91	CERAMIC CHIP	0.01μF		50V
	C3517	1-126-924-11	ELECT	330μF	20% 6.3V	C3554	1-126-947-11	ELECT	47μF	20%	16V
	C3518	1-163-038-91	CERAMIC CHIP	0.1μF	25V	C3555	1-126-935-11	ELECT	470μF	20%	16V
	C3519	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3556	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C3520	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3557	1-163-031-91	CERAMIC CHIP	0.01μF		50V	
C3521	1-163-237-11	CERAMIC CHIP	27pF	5% 50V	C3558	1-126-947-11	ELECT	47μF	20%	16V	
C3522	1-126-947-11	ELECT	47μF	20% 16V	C3559	1-163-031-91	CERAMIC CHIP	0.01μF		50V	
C3523	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3560	1-126-947-11	ELECT	47μF	20%	16V	
C3524	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3561	1-163-031-91	CERAMIC CHIP	0.01μF		50V	
C3525	1-163-038-91	CERAMIC CHIP	0.1μF	25V	C3562	1-163-031-91	CERAMIC CHIP	0.01μF		50V	
C3526	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3563	1-126-947-11	ELECT	47μF	20%	16V	
C3527	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3564	1-126-947-11	ELECT	47μF	20%	16V	
C3528	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3565	1-163-031-91	CERAMIC CHIP	0.01μF		50V	
C3529	1-165-319-11	CERAMIC CHIP	0.1μF	50V	C3566	1-163-031-91	CERAMIC CHIP	0.01μF		50V	
C3530	1-126-947-11	ELECT	47μF	20% 16V	CONNECTOR						
C3531	1-165-319-11	CERAMIC CHIP	0.1μF	50V	* CN3500	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P				
C3532	1-126-964-11	ELECT	10μF	20% 50V	FERRITE BEAD						
C3533	1-163-133-00	CERAMIC CHIP	470pF	5% 50V	FB3500	1-414-234-22	FERRITE	0μH			
					FB3501	1-414-234-22	FERRITE	0μH			
					FB3502	1-414-234-22	FERRITE	0μH			
					FB3503	1-414-234-22	FERRITE	0μH			





REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
FB3504	1-414-234-22	FERRITE	0μH	R3507	1-216-295-91	SHORT	
FB3505	1-414-234-22	FERRITE	0μH	R3508	1-216-295-91	SHORT	
FB3506	1-414-234-22	FERRITE	0μH	R3509	1-216-049-11	RES-CHIP	1K 5% 1/10W
FB3507	1-414-234-22	FERRITE	0μH	R3510	1-216-041-00	RES-CHIP	470 5% 1/10W
FB3508	1-414-234-22	FERRITE	0μH	R3511	1-216-041-00	RES-CHIP	470 5% 1/10W
FB3509	1-414-234-22	FERRITE	0μH				
<b><u>FILTER</u></b>				R3512	1-216-295-91	SHORT	
FL3500	1-239-848-21	FILTER, LOW PASS		R3514	1-216-025-11	RES-CHIP	100 5% 1/10W
FL3501	1-239-848-21	FILTER, LOW PASS		R3515	1-216-055-00	RES-CHIP	1.8K 5% 1/10W
FL3502	1-239-848-21	FILTER, LOW PASS		R3516	1-216-055-00	RES-CHIP	1.8K 5% 1/10W
FL3503	1-239-848-21	FILTER, LOW PASS		R3517	1-216-025-11	RES-CHIP	100 5% 1/10W
FL3504	1-233-512-21	FERRITE	37μH	R3518	1-216-025-11	RES-CHIP	100 5% 1/10W
FL3505	1-233-512-21	FERRITE	37μH	R3519	1-216-295-91	SHORT	
FL3506	1-233-512-21	FERRITE	37μH	R3520	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
<b><u>IC</u></b>				R3521	1-216-041-00	RES-CHIP	470 5% 1/10W
IC3500	6-700-188-01	IC IS41C16256-35K		R3522	1-216-041-00	RES-CHIP	470 5% 1/10W
IC3501	8-759-594-44	IC UPD64082GF-3BA		R3523	1-216-049-11	RES-CHIP	1K 5% 1/10W
IC3502	8-759-641-30	IC NJM2391DL1-33-TEI					
<b><u>COIL</u></b>				R3524	1-216-089-91	RES-CHIP	47K 5% 1/10W
L3500	1-414-265-21	INDUCTOR	4.7μH	R3525	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
L3501	1-412-058-11	INDUCTOR	10μH	R3526	1-216-105-91	RES-CHIP	220K 5% 1/10W
L3502	1-412-058-11	INDUCTOR	10μH	R3527	1-216-033-00	RES-CHIP	220 5% 1/10W
L3503	1-412-058-11	INDUCTOR	10μH	R3528	1-208-776-11	METAL CHIP	560 0.50% 1/10W
L3504	1-412-058-11	INDUCTOR	10μH				
L3505	1-412-058-11	INDUCTOR	10μH	R3529	1-208-772-11	METAL CHIP	390 0.50% 1/10W
<b><u>TRANSISTOR</u></b>				R3530	1-216-067-00	RES-CHIP	5.6K 5% 1/10W
Q3500	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3531	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q3501	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3532	1-216-025-11	RES-CHIP	100 5% 1/10W
Q3502	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3534	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q3503	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX					
Q3504	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3535	1-216-025-11	RES-CHIP	100 5% 1/10W
				R3538	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q3505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3539	1-216-043-91	RES-CHIP	560 5% 1/10W
Q3506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3540	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q3508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3541	1-216-067-00	RES-CHIP	5.6K 5% 1/10W
Q3509	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX					
Q3510	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3542	1-216-043-91	RES-CHIP	560 5% 1/10W
Q3511	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3543	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R3544	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q3512	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3545	1-216-043-91	RES-CHIP	560 5% 1/10W
Q3513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3547	1-216-067-00	RES-CHIP	5.6K 5% 1/10W
Q3514	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX					
Q3515	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3548	1-216-295-91	SHORT	
Q3516	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3549	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q3517	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3550	1-208-780-11	METAL CHIP	820 0.50% 1/10W
<b><u>RESISTOR</u></b>				R3551	1-216-043-91	RES-CHIP	560 5% 1/10W
R3503	1-216-017-91	RES-CHIP	47 5% 1/10W	R3552	1-216-031-00	RES-CHIP	180 5% 1/10W
R3504	1-216-295-91	SHORT					
R3505	1-216-295-91	SHORT		R3553	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R3506	1-216-295-91	SHORT		R3554	1-216-047-91	RES-CHIP	820 5% 1/10W
				R3555	1-216-075-00	RES-CHIP	12K 5% 1/10W
				R3556	1-216-085-91	RES-CHIP	33K 5% 1/10W
				R3557	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R3558	1-216-017-91	RES-CHIP	47 5% 1/10W
				R3559	1-216-295-91	SHORT	



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3560	1-216-049-11	RES-CHIP	1K	5%	1/10W	C3025	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
R3561	1-216-043-91	RES-CHIP	560	5%	1/10W	C3026	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
R3563	1-216-295-91	SHORT				C3027	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
R3564	1-216-295-91	SHORT				C3028	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R3565	1-216-067-00	RES-CHIP	5.6K	5%	1/10W	C3030	1-164-156-11	CERAMIC CHIP	0.1μF		25V
R3566	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	C3031	1-164-156-11	CERAMIC CHIP	0.1μF		25V
R3567	1-216-043-91	RES-CHIP	560	5%	1/10W	C3032	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
R3568	1-216-047-91	RES-CHIP	820	5%	1/10W	C3033	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
R3569	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	C3034	1-164-156-11	CERAMIC CHIP	0.1μF		25V
R3570	1-216-085-91	RES-CHIP	33K	5%	1/10W	C3035	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R3571	1-216-075-00	RES-CHIP	12K	5%	1/10W	C3036	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
R3572	1-216-049-11	RES-CHIP	1K	5%	1/10W	C3037	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
R3573	1-216-017-91	RES-CHIP	47	5%	1/10W	C3039	1-124-779-00	ELECT CHIP	10μF	20%	16V
R3588	1-216-043-91	RES-CHIP	560	5%	1/10W	C3040	1-124-779-00	ELECT CHIP	10μF	20%	16V
R3589	1-216-105-91	RES-CHIP	220K	5%	1/10W	C3041	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
<b>CRYSTAL</b>						C3043	1-164-156-11	CERAMIC CHIP	0.1μF		25V
X3500	1-767-606-11	VIBRATOR, CRYSTAL				C3044	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C3045	1-124-779-00	ELECT CHIP	10μF	20%	16V
						C3046	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
						C3047	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
						C3048	1-163-038-91	CERAMIC CHIP	0.1μF		25V
						C3049	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
						C3050	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
						C3051	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
						C3054	1-164-156-11	CERAMIC CHIP	0.1μF		25V
						C3055	1-124-779-00	ELECT CHIP	10μF	20%	16V
						C3056	1-164-156-11	CERAMIC CHIP	0.1μF		25V
						C3057	1-126-603-11	ELECT CHIP	4.7μF	20%	35V
						C3059	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
						C3060	1-126-204-11	ELECT CHIP	47μF	20%	16V
						C3061	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
						C3062	1-126-204-11	ELECT CHIP	47μF	20%	16V
						C3063	1-164-156-11	CERAMIC CHIP	0.1μF		25V
						C3064	1-117-681-11	ELECT CHIP	100μF	20%	16V
						C3066	1-126-204-11	ELECT CHIP	47μF	20%	16V
						C3067	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
						C3068	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
						C3069	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C3070	1-126-204-11	ELECT CHIP	47μF	20%	16V
						C3071	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
						C3072	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
						C3073	1-126-204-11	ELECT CHIP	47μF	20%	16V
						C3074	1-126-204-11	ELECT CHIP	47μF	20%	16V
						C3075	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
						C3076	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
						C3078	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C3079	1-125-838-11	CERAMIC CHIP	2.2μF	10%	6.3V
C3001	1-128-453-21	ELECT CHIP	47μF	20%	6.3V						
C3002	1-128-453-21	ELECT CHIP	47μF	20%	6.3V						
C3003	1-128-453-21	ELECT CHIP	47μF	20%	6.3V						
C3004	1-126-206-11	ELECT CHIP	100μF	20%	6.3V						
C3005	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3006	1-124-779-00	ELECT CHIP	10μF	20%	16V						
C3007	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V						
C3008	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V						
C3009	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V						
C3010	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3011	1-162-917-11	CERAMIC CHIP	15pF	5%	50V						
C3012	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3013	1-104-601-11	ELECT CHIP	10μF	20%	10V						
C3014	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V						
C3015	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V						
C3016	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V						
C3017	1-124-779-00	ELECT CHIP	10μF	20%	16V						
C3018	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3019	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3020	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V						
C3021	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V						
C3022	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3023	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V						
C3024	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V						



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3080	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3212	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3081	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3213	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3082	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3215	1-126-401-21	ELECT CHIP	1μF	20%	50V
C3083	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V	C3216	1-126-193-11	ELECT CHIP	1μF	20%	50V
C3085	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3218	1-126-193-11	ELECT CHIP	1μF	20%	50V
C3086	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3219	1-126-193-11	ELECT CHIP	1μF	20%	50V
C3087	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3220	1-128-993-21	ELECT CHIP	22μF	20%	10V
C3088	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3221	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3089	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3222	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3090	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3223	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3091	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3224	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3092	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3225	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3093	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3226	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3094	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3227	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3096	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3229	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3097	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3235	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3098	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3236	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3099	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C3237	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3113	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3239	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3114	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3240	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3115	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3241	1-164-361-11	CERAMIC CHIP	0.047μF		25V
C3116	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3242	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3117	1-126-603-11	ELECT CHIP	4.7μF	20%	35V	C3243	1-126-193-11	ELECT CHIP	1μF	20%	50V
C3120	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3245	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3127	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3246	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3128	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C3247	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3129	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3248	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3130	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C3249	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3131	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3250	1-216-295-91	SHORT			
C3132	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3251	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3133	1-125-838-11	CERAMIC CHIP	2.2μF	10%	6.3V	C3252	1-216-295-91	SHORT			
C3134	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3253	1-127-573-11	CERAMIC CHIP	1μF	10%	16V
C3135	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3254	1-127-573-11	CERAMIC CHIP	1μF	10%	16V
C3136	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V	C3255	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C3137	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3301	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3138	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3302	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3139	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3303	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3140	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3304	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3141	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C3305	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3142	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3306	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3172	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3307	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3173	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3308	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3204	1-126-193-11	ELECT CHIP	1μF	20%	50V	C3309	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3205	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3310	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3206	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3311	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3208	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3312	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3209	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3313	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3210	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3314	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3211	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V						



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3315	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3368	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3316	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3369	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3317	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3370	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3318	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3371	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3319	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3372	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3320	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3374	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3321	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3375	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V
C3322	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3376	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3323	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3377	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3324	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3378	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3325	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3379	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3326	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3401	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3327	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3402	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3328	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3403	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3331	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3404	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3332	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3405	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3333	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3406	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C3335	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3407	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C3336	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3408	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3338	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3409	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3339	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3410	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3340	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3411	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C3341	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3412	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C3343	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3413	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3344	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3414	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3345	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3415	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3346	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3416	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3347	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3417	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3348	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3418	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C3349	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3419	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3350	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3420	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3351	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3421	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3352	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3422	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3353	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3423	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3354	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3424	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3355	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3425	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V
C3356	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3426	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3357	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3428	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C3358	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3429	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3359	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3430	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3360	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3431	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3361	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3432	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3362	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V	C3433	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3363	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3434	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3364	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3435	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3365	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3436	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C3366	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3437	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3367	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3438	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3439	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3491	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3440	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C3492	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3441	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C3493	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3442	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3494	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3443	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3495	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3444	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3496	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3445	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3604	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3446	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C3605	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3447	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3606	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3448	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3607	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3449	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3608	1-163-275-11	CERAMIC CHIP	0.001μF	5%	50V
C3450	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3609	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C3452	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3610	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3453	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3611	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3454	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3612	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3455	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3613	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3456	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3618	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3457	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3619	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3458	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3623	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C3460	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	C3624	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3462	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3625	1-163-275-11	CERAMIC CHIP	0.001μF	5%	50V
C3463	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3626	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C3464	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3627	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3465	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3628	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3466	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3629	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3467	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3630	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3468	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3635	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3469	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3636	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3470	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3637	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3473	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3638	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3474	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3639	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3475	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3640	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C3476	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3641	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3477	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3642	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3478	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3643	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3479	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3644	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3480	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3652	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C3481	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3653	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3482	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3654	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3483	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3655	1-164-816-11	CERAMIC CHIP	220pF	2%	50V
C3484	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3656	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3485	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3657	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C3486	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3658	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C3487	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3659	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3488	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3660	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3489	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C3490	1-124-779-00	ELECT CHIP	10μF	20%	16V						





REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<b>CONNECTOR</b>				<b>FILTER</b>			
*	CN3201	1-691-616-21	CONNECTOR, BOARD TO BOARD 15P	FL3001	1-239-848-11	FILTER, LOW PASS	
	CN3202	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	FL3002	1-239-848-11	FILTER, LOW PASS	
*	CN3203	1-785-303-11	CONNECTOR, DIN (PLUG) 64	FL3003	1-781-923-11	FILTER, LOW PASS (SMD)	
*	CN3204	1-564-526-11	PLUG,CONNECTOR 11P	FL3004	1-239-848-11	FILTER, LOW PASS	
*	CN3205	1-785-304-11	CONNECTOR, DIN (RECEPTACLE) 64	FL3401	1-781-923-21	FILTER, LOW PASS (SMD)	
<b>DIODE</b>				<b>IC</b>			
	D3001	8-719-978-33	DIODE UDZSTE-176.8B	IC3001	8-752-093-84	IC CXA2151Q	
	D3002	8-719-978-33	DIODE UDZSTE-176.8B	IC3002	8-759-595-97	IC SN74LV4053ANSR	
	D3003	8-719-978-33	DIODE UDZSTE-176.8B	IC3003	8-752-394-69	IC CXD2073Q-T4	
	D3004	8-719-978-33	DIODE UDZSTE-176.8B	IC3004	8-759-595-97	IC SN74LV4053ANSR	
	D3005	8-719-978-33	DIODE UDZSTE-176.8B	IC3048	8-752-089-50	IC CXA2103Q	
	D3006	8-719-978-33	DIODE UDZSTE-176.8B	IC3089	6-700-149-01	IC M24C04-MN6T(A)	
	D3007	8-719-978-33	DIODE UDZSTE-176.8B	IC3090	6-800-050-01	IC MB94918RpF-G-137-BND	
	D3089	8-719-800-76	DIODE MA153-TX	IC3091	8-759-349-11	IC PST9145NL	
	D3090	8-719-800-76	DIODE MA153-TX	IC3110	8-752-089-50	IC CXA2103Q	
	D3201	8-719-977-28	DIODE UDZSTE-1710B	IC3201	8-752-080-04	IC CXA2069Q	
	D3202	8-719-977-28	DIODE UDZSTE-1710B	IC3202	8-759-351-01	IC TEA6422DT	
	D3204	8-719-977-28	DIODE UDZSTE-1710B	IC3203	8-759-331-71	IC NJM4558E(TE2)	
	D3205	8-719-977-28	DIODE UDZSTE-1710B	IC3301	6-700-134-01	IC NT56V1616A0T-7-T&R	
	D3206	8-719-977-28	DIODE UDZSTE-1710B	IC3302	8-749-015-18	IC PQ07VZ012P	
	D3209	8-719-914-44	DIODE DAP202K-T-146	IC3303	8-752-409-78	IC CXD2095AQ	
	D3210	8-719-041-97	DIODE MA113-(TX)	IC3304	8-759-447-90	IC TLC5733AIPM	
	D3211	8-719-404-50	DIODE MA111-TX	IC3305	8-759-669-75	IC TLC2932IPWR	
	D3212	8-719-977-28	DIODE UDZSTE-1710B	IC3306	8-759-669-78	IC TLC2933IPWR-12	
	D3213	8-719-977-28	DIODE UDZSTE-1710B	IC3401	8-749-015-18	IC PQ07VZ012P	
	D3214	8-719-977-28	DIODE UDZSTE-1710B	IC3402	8-759-675-89	IC TC59S6432CFT-80(YB)	
	D3215	8-719-977-28	DIODE UDZSTE-1710B	IC3403	8-759-460-29	IC PST9120NL	
	D3216	8-719-977-28	DIODE UDZSTE-1710B	IC3404	8-759-669-75	IC TLC2932IPWR	
	D3217	8-719-977-28	DIODE UDZSTE-1710B	IC3405	8-759-485-79	IC TC7SET08FU(TE85R)	
	D3301	8-719-056-77	DIODE UDZ-TE-17-3.9B	IC3406	8-759-485-79	IC TC7SET08FU(TE85R)	
	D3401	8-719-914-43	DIODE DAN202K-T-146	IC3407	8-759-485-79	IC TC7SET08FU(TE85R)	
	D3402	8-719-914-44	DIODE DAP202K-T-146	IC3408	8-759-672-57	IC CXD9509AQ	
	D3403	8-719-978-33	DIODE UDZSTE-176.8B	IC3409	8-749-015-18	IC PQ07VZ012P	
<b>FERRITE BEAD</b>				IC3410	8-752-367-59	IC CXD2309Q	
	FB3201	1-414-234-22	FERRITE 0μH	IC3411	8-759-082-57	IC TC7W04FU(TE12R)	
	FB3202	1-414-234-22	FERRITE 0μH	IC3412	8-759-082-58	IC TC7W08FU(TE12R)	
	FB3203	1-216-295-91	SHORT	IC3413	8-759-595-97	IC SN74LV4053ANSR	
	FB3204	1-414-234-22	FERRITE 0μH	IC3414	8-759-548-56	IC M52055FP	
	FB3205	1-414-234-22	FERRITE 0μH	IC3601	8-752-916-40	IC CXP85840A-039Q	
	FB3206	1-414-234-22	FERRITE 0μH	IC3602	8-752-916-40	IC CXP85840A-039Q	
	FB3401	1-414-235-22	FERRITE 0μH	IC3603	8-752-395-13	IC CXD2085M-T4	
	FB3402	1-414-235-22	FERRITE 0μH	IC3604	8-759-700-07	IC NJM2903M-TE2	
	FB3403	1-216-295-91	SHORT	<b>COIL</b>			
	FB3601	1-414-235-22	FERRITE 0μH	L3001	1-216-295-91	SHORT	
				L3002	1-469-555-21	INDUCTOR	10μH
				L3003	1-469-555-21	INDUCTOR	10μH



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L3004	1-469-555-21	INDUCTOR	10μH	Q3006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3005	1-469-555-21	INDUCTOR	10μH	Q3007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3049	1-469-555-21	INDUCTOR	10μH	Q3008	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3050	1-469-555-21	INDUCTOR	10μH	Q3009	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3051	1-469-555-21	INDUCTOR	10μH	Q3010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3089	1-414-233-22	FERRITE	0μH	Q3011	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3112	1-469-555-21	INDUCTOR	10μH	Q3014	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3113	1-469-555-21	INDUCTOR	10μH	Q3015	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3301	1-412-058-11	INDUCTOR	10μH	Q3016	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3302	1-469-555-21	INDUCTOR	10μH	Q3017	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3303	1-412-052-21	INDUCTOR	1μH	Q3018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3304	1-469-555-21	INDUCTOR	10μH	Q3021	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3305	1-469-555-21	INDUCTOR	10μH	Q3022	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3306	1-469-561-21	INDUCTOR	100μH	Q3023	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3307	1-469-555-21	INDUCTOR	10μH	Q3025	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3308	1-469-561-21	INDUCTOR	100μH	Q3026	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3309	1-469-561-21	INDUCTOR	100μH	Q3027	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3310	1-469-561-21	INDUCTOR	100μH	Q3035	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3311	1-469-561-21	INDUCTOR	100μH	Q3036	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3312	1-469-555-21	INDUCTOR	10μH	Q3037	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3401	1-412-052-21	INDUCTOR	1μH	Q3038	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3402	1-412-052-21	INDUCTOR	1μH	Q3039	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3403	1-469-561-21	INDUCTOR	100μH	Q3040	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3404	1-469-561-21	INDUCTOR	100μH	Q3049	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3405	1-469-555-21	INDUCTOR	10μH	Q3051	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3406	1-469-555-21	INDUCTOR	10μH	Q3053	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3407	1-469-555-21	INDUCTOR	10μH	Q3054	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3409	1-469-555-21	INDUCTOR	10μH	Q3056	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3410	1-412-052-21	INDUCTOR	1μH	Q3058	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3411	1-412-058-11	INDUCTOR	10μH	Q3089	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3412	1-469-555-21	INDUCTOR	10μH	Q3090	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3413	1-469-555-21	INDUCTOR	10μH	Q3091	1-801-806-11	TRANSISTOR DTC144EKA-T146	
L3414	1-469-555-21	INDUCTOR	10μH	Q3101	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3416	1-469-555-21	INDUCTOR	10μH	Q3102	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3601	1-469-555-21	INDUCTOR	10μH	Q3103	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3602	1-412-951-11	INDUCTOR	10μH	Q3104	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3603	1-469-555-21	INDUCTOR	10μH	Q3110	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3604	1-412-951-11	INDUCTOR	10μH	Q3111	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3605	1-469-555-21	INDUCTOR	10μH	Q3112	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3606	1-469-555-21	INDUCTOR	10μH	Q3201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3607	1-469-555-21	INDUCTOR	10μH	Q3202	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L3608	1-414-754-11	INDUCTOR	10μH	Q3203	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L3609	1-414-754-11	INDUCTOR	10μH	Q3204	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
<b>TRANSISTOR</b>				Q3205	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		Q3206	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		Q3207	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3003	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		Q3208	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		Q3209	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q3210	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3009	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
Q3211	1-801-806-11	TRANSISTOR DTC144EKA-T146				R3010	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
Q3213	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3011	1-216-821-11	RES-CHIP	1K	5%	1/16W
Q3214	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3012	1-216-864-11	SHORT			
Q3215	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3013	1-216-813-11	RES-CHIP	220	5%	1/16W
Q3216	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3014	1-218-676-11	METAL CHIP	220	0.50%	1/16W
Q3217	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3015	1-216-864-11	SHORT			
Q3301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3017	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3018	1-216-817-11	RES-CHIP	470	5%	1/16W
Q3303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3019	1-218-686-11	METAL CHIP	560	0.50%	1/16W
Q3304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3020	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3305	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3021	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3401	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3022	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3402	8-729-028-28	TRANSISTOR 2SK2036(TE85L)				R3023	1-216-833-11	RES-CHIP	10K	5%	1/16W
Q3403	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3024	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3404	8-729-028-28	TRANSISTOR 2SK2036(TE85L)				R3025	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3405	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3026	1-216-035-00	RES-CHIP	270	5%	1/10W
Q3406	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3027	1-218-684-11	METAL CHIP	470	0.50%	1/16W
Q3407	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3028	1-218-688-11	METAL CHIP	680	0.50%	1/16W
Q3408	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3029	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
Q3409	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3030	1-216-864-11	SHORT			
Q3410	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3035	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3411	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3036	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3412	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3037	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3413	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3038	1-218-686-11	METAL CHIP	560	0.50%	1/16W
Q3414	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3039	1-218-686-11	METAL CHIP	560	0.50%	1/16W
Q3415	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R3040	1-218-686-11	METAL CHIP	560	0.50%	1/16W
Q3603	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3042	1-216-821-11	RES-CHIP	1K	5%	1/16W
Q3604	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3043	1-216-837-11	RES-CHIP	22K	5%	1/16W
Q3605	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3044	1-216-837-11	RES-CHIP	22K	5%	1/16W
Q3606	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3045	1-216-817-11	RES-CHIP	470	5%	1/16W
Q3609	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3046	1-216-817-11	RES-CHIP	470	5%	1/16W
Q3610	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3047	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3611	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3048	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3612	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3049	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3613	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3050	1-216-809-11	RES-CHIP	100	5%	1/16W
Q3617	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3051	1-216-845-11	RES-CHIP	100K	5%	1/16W
Q3618	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3052	1-216-845-11	RES-CHIP	100K	5%	1/16W
Q3619	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3053	1-216-845-11	RES-CHIP	100K	5%	1/16W
Q3620	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R3056	1-216-817-11	RES-CHIP	470	5%	1/16W
<b>RESISTOR</b>						R3057	1-216-817-11	RES-CHIP	470	5%	1/16W
R3001	1-216-805-11	RES-CHIP	47	5%	1/16W	R3058	1-216-835-11	RES-CHIP	15K	5%	1/16W
R3002	1-216-805-11	RES-CHIP	47	5%	1/16W	R3059	1-216-817-11	RES-CHIP	470	5%	1/16W
R3003	1-216-842-11	RES-CHIP	56K	5%	1/16W	R3060	1-216-809-11	RES-CHIP	100	5%	1/16W
R3004	1-216-818-11	RES-CHIP	560	5%	1/16W	R3061	1-216-829-11	RES-CHIP	4.7K	5%	1/16W
R3005	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3062	1-218-697-11	METAL CHIP	1.6K	0.50%	1/16W
R3006	1-216-817-11	RES-CHIP	470	5%	1/16W	R3063	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R3007	1-218-686-11	METAL CHIP	560	0.50%	1/16W	R3064	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
						R3066	1-216-809-11	RES-CHIP	100	5%	1/16W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3067	1-216-845-11	RES-CHIP	100K	5%	1/16W	R3130	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3068	1-216-809-11	RES-CHIP	100	5%	1/16W	R3131	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3071	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3132	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3072	1-216-833-11	RES-CHIP	10K	5%	1/16W	R3133	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3073	1-216-805-11	RES-CHIP	47	5%	1/16W	R3134	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3074	1-216-805-11	RES-CHIP	47	5%	1/16W	R3135	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3075	1-216-821-11	RES-CHIP	1K	5%	1/16W						
R3076	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3136	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3077	1-216-809-11	RES-CHIP	100	5%	1/16W	R3137	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3078	1-216-832-11	RES-CHIP	8.2K	5%	1/16W	R3138	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3079	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3139	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3080	1-216-845-11	RES-CHIP	100K	5%	1/16W	R3140	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3081	1-216-809-11	RES-CHIP	100	5%	1/16W	R3141	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3082	1-216-845-11	RES-CHIP	100K	5%	1/16W	R3142	1-216-805-11	RES-CHIP	47	5%	1/16W
R3083	1-216-864-11	SHORT				R3143	1-216-805-11	RES-CHIP	47	5%	1/16W
R3084	1-216-864-11	SHORT				R3144	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3085	1-216-864-11	SHORT				R3145	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3086	1-216-864-11	SHORT									
R3087	1-216-864-11	SHORT				R3146	1-216-832-11	RES-CHIP	8.2K	5%	1/16W
R3088	1-216-864-11	SHORT				R3147	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3089	1-216-864-11	SHORT				R3151	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3090	1-216-861-11	RES-CHIP	2.2M	5%	1/16W	R3152	1-216-818-11	RES-CHIP	560	5%	1/16W
R3091	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3154	1-216-832-11	RES-CHIP	8.2K	5%	1/16W
R3092	1-216-825-11	RES-CHIP	2.2K	5%	1/16W						
R3093	1-216-809-11	RES-CHIP	100	5%	1/16W	R3155	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3094	1-216-809-11	RES-CHIP	100	5%	1/16W	R3156	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3095	1-216-845-11	RES-CHIP	100K	5%	1/16W	R3157	1-216-817-11	RES-CHIP	470	5%	1/16W
R3096	1-216-817-11	RES-CHIP	470	5%	1/16W	R3158	1-216-817-11	RES-CHIP	470	5%	1/16W
R3097	1-216-845-11	RES-CHIP	100K	5%	1/16W	R3159	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3098	1-216-805-11	RES-CHIP	47	5%	1/16W						
R3099	1-216-805-11	RES-CHIP	47	5%	1/16W	R3160	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3100	1-216-809-11	RES-CHIP	100	5%	1/16W	R3161	1-216-809-11	RES-CHIP	100	5%	1/16W
R3101	1-216-809-11	RES-CHIP	100	5%	1/16W	R3162	1-216-815-11	RES-CHIP	330	5%	1/16W
R3102	1-216-809-11	RES-CHIP	100	5%	1/16W	R3163	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3103	1-216-837-11	RES-CHIP	22K	5%	1/16W	R3164	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3104	1-216-809-11	RES-CHIP	100	5%	1/16W						
R3105	1-216-809-11	RES-CHIP	100	5%	1/16W	R3165	1-216-861-11	RES-CHIP	2.2M	5%	1/16W
R3106	1-216-837-11	RES-CHIP	22K	5%	1/16W	R3166	1-216-861-11	RES-CHIP	2.2M	5%	1/16W
R3107	1-216-864-11	SHORT				R3180	1-218-673-11	METAL CHIP	160	0.50%	1/16W
R3108	1-216-817-11	RES-CHIP	470	5%	1/16W	R3181	1-218-673-11	METAL CHIP	160	0.50%	1/16W
R3121	1-216-809-11	RES-CHIP	100	5%	1/16W	R3182	1-218-673-11	METAL CHIP	160	0.50%	1/16W
R3122	1-216-809-11	RES-CHIP	100	5%	1/16W						
R3123	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W	R3183	1-216-809-11	RES-CHIP	100	5%	1/16W
R3124	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W	R3184	1-216-809-11	RES-CHIP	100	5%	1/16W
R3125	1-216-823-11	RES-CHIP	1.5K	5%	1/16W	R3185	1-216-809-11	RES-CHIP	100	5%	1/16W
R3126	1-216-823-11	RES-CHIP	1.5K	5%	1/16W	R3186	1-218-674-11	METAL CHIP	180	0.50%	1/16W
R3127	1-216-829-11	RES-CHIP	4.7K	5%	1/16W	R3187	1-218-674-11	METAL CHIP	180	0.50%	1/16W
R3128	1-216-829-11	RES-CHIP	4.7K	5%	1/16W						
R3129	1-216-835-11	RES-CHIP	15K	5%	1/16W	R3188	1-218-674-11	METAL CHIP	180	0.50%	1/16W
						R3190	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
						R3191	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
						R3192	1-216-814-11	RES-CHIP	270	5%	1/16W
						R3193	1-218-698-11	METAL CHIP	1.8K	0.50%	1/16W
						R3194	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
						R3195	1-216-816-11	RES-CHIP	390	5%	1/16W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3196	1-216-833-11	RES-CHIP	10K	5%	1/16W	R3257	1-216-809-11	RES-CHIP	100	5%	1/16W
R3197	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3258	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3198	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3259	1-216-853-11	RES-CHIP	470K	5%	1/16W
R3201	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3260	1-216-853-11	RES-CHIP	470K	5%	1/16W
R3202	1-216-809-11	RES-CHIP	100	5%	1/16W	R3261	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3203	1-216-809-11	RES-CHIP	100	5%	1/16W						
R3204	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3262	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3205	1-216-809-11	RES-CHIP	100	5%	1/16W	R3263	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3207	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3264	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3208	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3265	1-216-857-11	RES-CHIP	1M	5%	1/16W
R3209	1-216-809-11	RES-CHIP	100	5%	1/16W	R3266	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3210	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3267	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3211	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3268	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3212	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3269	1-216-809-11	RES-CHIP	100	5%	1/16W
R3213	1-216-809-11	RES-CHIP	100	5%	1/16W	R3270	1-249-382-11	CARBON	1.2	5%	1/4W
R3215	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3272	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3216	1-216-821-11	RES-CHIP	1K	5%	1/16W						
R3217	1-216-809-11	RES-CHIP	100	5%	1/16W	R3273	1-216-819-11	RES-CHIP	680	5%	1/16W
R3218	1-216-809-11	RES-CHIP	100	5%	1/16W	R3275	1-216-819-11	RES-CHIP	680	5%	1/16W
R3219	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3276	1-216-819-11	RES-CHIP	680	5%	1/16W
R3220	1-216-809-11	RES-CHIP	100	5%	1/16W	R3277	1-216-819-11	RES-CHIP	680	5%	1/16W
R3221	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3279	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3222	1-216-825-11	RES-CHIP	2.2K	5%	1/16W						
R3223	1-216-809-11	RES-CHIP	100	5%	1/16W	R3280	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3224	1-216-815-11	RES-CHIP	330	5%	1/16W	R3281	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3226	1-216-809-11	RES-CHIP	100	5%	1/16W	R3282	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3227	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3284	1-216-864-11	SHORT			
R3228	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3285	1-216-817-11	RES-CHIP	470	5%	1/16W
R3229	1-216-809-11	RES-CHIP	100	5%	1/16W	R3286	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R3230	1-216-809-11	RES-CHIP	100	5%	1/16W						
R3231	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3287	1-216-817-11	RES-CHIP	470	5%	1/16W
R3232	1-216-809-11	RES-CHIP	100	5%	1/16W	R3288	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3233	1-216-809-11	RES-CHIP	100	5%	1/16W	R3289	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3234	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3290	1-216-809-11	RES-CHIP	100	5%	1/16W
R3235	1-216-809-11	RES-CHIP	100	5%	1/16W	R3291	1-216-842-11	RES-CHIP	56K	5%	1/16W
R3236	1-216-809-11	RES-CHIP	100	5%	1/16W	R3292	1-216-857-11	RES-CHIP	1M	5%	1/16W
R3240	1-216-825-11	RES-CHIP	2.2K	5%	1/16W						
R3241	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3293	1-216-803-11	RES-CHIP	33	5%	1/16W
R3242	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3294	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3244	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3296	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3246	1-216-809-11	RES-CHIP	100	5%	1/16W	R3297	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3247	1-216-809-11	RES-CHIP	100	5%	1/16W	R3298	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3248	1-216-809-11	RES-CHIP	100	5%	1/16W						
R3249	1-216-809-11	RES-CHIP	100	5%	1/16W	R3299	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3250	1-216-809-11	RES-CHIP	100	5%	1/16W	R3300	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3254	1-216-809-11	RES-CHIP	100	5%	1/16W	R3301	1-216-809-11	RES-CHIP	100	5%	1/16W
R3255	1-216-809-11	RES-CHIP	100	5%	1/16W	R3302	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3256	1-216-809-11	RES-CHIP	100	5%	1/16W	R3303	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W
						R3304	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
						R3305	1-216-809-11	RES-CHIP	100	5%	1/16W
						R3306	1-216-809-11	RES-CHIP	100	5%	1/16W
						R3307	1-216-864-11	SHORT			
						R3308	1-216-864-11	SHORT			
						R3309	1-211-987-11	METAL CHIP	56	0.50%	1/16W





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3310	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3359	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3311	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3360	1-216-827-11	RES-CHIP	3.3K	5%	1/16W
R3312	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3361	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3313	1-216-835-11	RES-CHIP	15K	5%	1/16W	R3364	1-216-864-11	SHORT			
R3314	1-211-990-11	METAL CHIP	75	0.50%	1/16W	R3366	1-216-864-11	SHORT			
R3315	1-216-835-11	RES-CHIP	15K	5%	1/16W	R3367	1-216-803-11	RES-CHIP	33	5%	1/16W
R3316	1-211-989-11	METAL CHIP	68	0.50%	1/16W	R3369	1-216-864-11	SHORT			
R3317	1-211-989-11	METAL CHIP	68	0.50%	1/16W	R3371	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R3318	1-211-990-11	METAL CHIP	75	0.50%	1/16W	R3372	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R3319	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3373	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R3320	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3382	1-216-864-11	SHORT			
R3321	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3401	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
R3322	1-211-987-11	METAL CHIP	56	0.50%	1/16W	R3403	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R3323	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3404	1-216-864-11	SHORT			
R3324	1-216-827-11	RES-CHIP	3.3K	5%	1/16W	R3405	1-216-864-11	SHORT			
R3325	1-216-827-11	RES-CHIP	3.3K	5%	1/16W	R3410	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3326	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3421	1-216-295-91	SHORT			
R3327	1-216-835-11	RES-CHIP	15K	5%	1/16W	R3422	1-216-295-91	SHORT			
R3328	1-216-864-11	SHORT				R3423	1-216-813-11	RES-CHIP	220	5%	1/16W
R3329	1-216-815-11	RES-CHIP	330	5%	1/16W	R3429	1-216-823-11	RES-CHIP	1.5K	5%	1/16W
R3330	1-216-815-11	RES-CHIP	330	5%	1/16W	R3432	1-216-815-11	RES-CHIP	330	5%	1/16W
R3331	1-216-841-11	RES-CHIP	47K	5%	1/16W	R3434	1-216-809-11	RES-CHIP	100	5%	1/16W
R3332	1-218-272-11	RES-CHIP	5.1K	5%	1/16W	R3445	1-216-864-11	SHORT			
R3333	1-216-864-11	SHORT				R3446	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3334	1-216-809-11	RES-CHIP	100	5%	1/16W	R3447	1-216-819-11	RES-CHIP	680	5%	1/16W
R3335	1-216-833-11	RES-CHIP	10K	5%	1/16W	R3448	1-216-855-11	RES-CHIP	680K	5%	1/16W
R3337	1-216-820-11	RES-CHIP	820	5%	1/16W	R3452	1-216-295-91	SHORT			
R3338	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3454	1-216-825-11	RES-CHIP	2.2K	5%	1/16W
R3339	1-216-855-11	RES-CHIP	680K	5%	1/16W	R3460	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3340	1-216-855-11	RES-CHIP	680K	5%	1/16W	R3461	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3341	1-216-813-11	RES-CHIP	220	5%	1/16W	R3464	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3342	1-220-158-11	RES-CHIP	3.6K	5%	1/16W	R3465	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3343	1-216-809-11	RES-CHIP	100	5%	1/16W	R3467	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3344	1-216-853-11	RES-CHIP	470K	5%	1/16W	R3470	1-216-809-11	RES-CHIP	100	5%	1/16W
R3345	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W	R3471	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3346	1-216-809-11	RES-CHIP	100	5%	1/16W	R3472	1-216-801-11	RES-CHIP	22	5%	1/16W
R3347	1-216-815-11	RES-CHIP	330	5%	1/16W	R3475	1-216-809-11	RES-CHIP	100	5%	1/16W
R3348	1-216-864-11	SHORT				R3476	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3349	1-218-687-11	METAL CHIP	620	0.50%	1/16W	R3477	1-218-701-11	METAL CHIP	2.4K	0.50%	1/16W
R3350	1-216-814-11	RES-CHIP	270	5%	1/16W	R3478	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3351	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3483	1-218-701-11	METAL CHIP	2.4K	0.50%	1/16W
R3352	1-216-853-11	RES-CHIP	470K	5%	1/16W	R3484	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3353	1-216-837-11	RES-CHIP	22K	5%	1/16W	R3485	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3354	1-216-813-11	RES-CHIP	220	5%	1/16W	R3486	1-216-801-11	RES-CHIP	22	5%	1/16W
R3355	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3489	1-216-864-11	SHORT			
R3356	1-216-864-11	SHORT				R3490	1-216-864-11	SHORT			
R3357	1-218-676-11	METAL CHIP	220	0.50%	1/16W	R3491	1-216-821-11	RES-CHIP	1K	5%	1/16W
R3358	1-218-676-11	METAL CHIP	220	0.50%	1/16W	R3492	1-216-057-00	RES-CHIP	2.2K	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3493	1-218-701-11	METAL CHIP	2.4K	0.50%	1/16W	R3659	1-216-815-11	RES-CHIP	330	5%	1/16W
R3495	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3660	1-216-815-11	RES-CHIP	330	5%	1/16W
R3496	1-216-801-11	RES-CHIP	22	5%	1/16W	R3661	1-216-809-11	RES-CHIP	100	5%	1/16W
R3497	1-216-829-11	RES-CHIP	4.7K	5%	1/16W	R3662	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3498	1-216-818-11	RES-CHIP	560	5%	1/16W	R3663	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3499	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3664	1-216-841-11	RES-CHIP	47K	5%	1/16W
R3602	1-216-809-11	RES-CHIP	100	5%	1/16W	R3665	1-216-817-11	RES-CHIP	470	5%	1/16W
R3606	1-216-864-11	SHORT				R3666	1-216-809-11	RES-CHIP	100	5%	1/16W
R3609	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3667	1-216-839-11	RES-CHIP	33K	5%	1/16W
R3610	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3668	1-216-797-11	RES-CHIP	10	5%	1/16W
R3611	1-216-833-11	RES-CHIP	10K	5%	1/16W	R3669	1-216-809-11	RES-CHIP	100	5%	1/16W
R3612	1-216-857-11	RES-CHIP	1M	5%	1/16W	R3672	1-216-864-11	SHORT			
R3613	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3673	1-216-809-11	RES-CHIP	100	5%	1/16W
R3614	1-216-813-11	RES-CHIP	220	5%	1/16W	R3674	1-216-813-11	RES-CHIP	220	5%	1/16W
R3615	1-216-809-11	RES-CHIP	100	5%	1/16W	R3675	1-216-813-11	RES-CHIP	220	5%	1/16W
R3616	1-216-805-11	RES-CHIP	47	5%	1/16W	R3676	1-216-809-11	RES-CHIP	100	5%	1/16W
R3617	1-216-805-11	RES-CHIP	47	5%	1/16W	R3677	1-216-809-11	RES-CHIP	100	5%	1/16W
R3618	1-216-817-11	RES-CHIP	470	5%	1/16W	R3678	1-216-809-11	RES-CHIP	100	5%	1/16W
R3619	1-216-809-11	RES-CHIP	100	5%	1/16W	R3679	1-216-809-11	RES-CHIP	100	5%	1/16W
R3620	1-216-813-11	RES-CHIP	220	5%	1/16W	R3680	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3621	1-216-813-11	RES-CHIP	220	5%	1/16W	R3681	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3622	1-216-813-11	RES-CHIP	220	5%	1/16W	R3682	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3623	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3683	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3624	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3684	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3625	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3685	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3626	1-216-815-11	RES-CHIP	330	5%	1/16W	R3686	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3627	1-216-815-11	RES-CHIP	330	5%	1/16W	R3687	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3628	1-216-815-11	RES-CHIP	330	5%	1/16W	R3688	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3630	1-216-809-11	RES-CHIP	100	5%	1/16W	R3689	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3639	1-216-864-11	SHORT				R3690	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3640	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3691	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3641	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3692	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3642	1-216-833-11	RES-CHIP	10K	5%	1/16W	R3693	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3644	1-216-857-11	RES-CHIP	1M	5%	1/16W	R3694	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3645	1-216-821-11	RES-CHIP	1K	5%	1/16W	R3695	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3646	1-216-813-11	RES-CHIP	220	5%	1/16W	R3696	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3647	1-216-809-11	RES-CHIP	100	5%	1/16W	R3697	1-216-833-11	RES-CHIP	10K	5%	1/16W
R3648	1-216-805-11	RES-CHIP	47	5%	1/16W	R3698	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3649	1-216-805-11	RES-CHIP	47	5%	1/16W	R3699	1-216-845-11	RES-CHIP	100K	5%	1/16W
R3650	1-216-817-11	RES-CHIP	470	5%	1/16W	R3800	1-216-864-11	SHORT			
R3651	1-216-809-11	RES-CHIP	100	5%	1/16W	R3802	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3652	1-216-813-11	RES-CHIP	220	5%	1/16W	R3803	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3653	1-216-813-11	RES-CHIP	220	5%	1/16W	R3804	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3654	1-216-813-11	RES-CHIP	220	5%	1/16W	R3805	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3655	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3806	1-218-662-11	METAL CHIP	56	0.50%	1/16W
R3656	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3807	1-208-754-11	METAL CHIP	68	0.50%	1/10W
R3657	1-216-825-11	RES-CHIP	2.2K	5%	1/16W	R3808	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3658	1-216-815-11	RES-CHIP	330	5%	1/16W	R3809	1-208-755-11	METAL CHIP	75	0.50%	1/10W





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3810	1-208-758-11	METAL CHIP	100	0.50%	1/10W	R3876	1-208-762-11	METAL CHIP	150	0.50%	1/10W
R3811	1-216-809-11	RES-CHIP	100	5%	1/16W	R3901	1-216-035-00	RES-CHIP	270	5%	1/10W
R3812	1-216-809-11	RES-CHIP	100	5%	1/16W	R3902	1-216-035-00	RES-CHIP	270	5%	1/10W
R3813	1-216-809-11	RES-CHIP	100	5%	1/16W	R3903	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3814	1-211-969-11	METAL CHIP	10	0.50%	1/16W	R3904	1-216-837-11	RES-CHIP	22K	5%	1/16W
R3815	1-211-973-11	METAL CHIP	15	0.50%	1/16W	R3905	1-216-809-11	RES-CHIP	100	5%	1/16W
R3816	1-211-977-11	METAL CHIP	22	0.50%	1/16W	R3906	1-216-809-11	RES-CHIP	100	5%	1/16W
R3817	1-211-977-11	METAL CHIP	22	0.50%	1/16W	R3907	1-216-809-11	RES-CHIP	100	5%	1/16W
R3820	1-218-684-11	METAL CHIP	470	0.50%	1/16W	R3908	1-216-809-11	RES-CHIP	100	5%	1/16W
R3821	1-218-684-11	METAL CHIP	470	0.50%	1/16W	R3909	1-216-809-11	RES-CHIP	100	5%	1/16W
R3822	1-218-684-11	METAL CHIP	470	0.50%	1/16W	R3910	1-216-809-11	RES-CHIP	100	5%	1/16W
R3823	1-216-826-11	RES-CHIP	2.7K	5%	1/16W	R3914	1-216-864-11	SHORT			
R3824	1-216-826-11	RES-CHIP	2.7K	5%	1/16W	R3915	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3825	1-216-826-11	RES-CHIP	2.7K	5%	1/16W	R3916	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3826	1-216-809-11	RES-CHIP	100	5%	1/16W	R3917	1-211-969-11	METAL CHIP	10	0.50%	1/16W
R3828	1-218-684-11	METAL CHIP	470	0.50%	1/16W	R3924	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3829	1-218-684-11	METAL CHIP	470	0.50%	1/16W	R3925	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3830	1-218-684-11	METAL CHIP	470	0.50%	1/16W	R3926	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3831	1-216-864-11	SHORT				R3933	1-216-864-11	SHORT			
R3832	1-216-864-11	SHORT				R3937	1-216-809-11	RES-CHIP	100	5%	1/16W
R3833	1-216-864-11	SHORT				R3940	1-216-864-11	SHORT			
R3840	1-216-807-11	RES-CHIP	68	5%	1/16W	R3942	1-216-864-11	SHORT			
R3843	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W	R3943	1-216-864-11	SHORT			
R3844	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W	R3945	1-216-864-11	SHORT			
R3845	1-218-692-11	METAL CHIP	1K	0.50%	1/16W	R3946	1-216-864-11	SHORT			
R3846	1-216-801-11	RES-CHIP	22	5%	1/16W	R3953	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3847	1-216-801-11	RES-CHIP	22	5%	1/16W	R3954	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3848	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R3955	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3849	1-218-675-11	METAL CHIP	200	0.50%	1/16W	R3956	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3850	1-218-675-11	METAL CHIP	200	0.50%	1/16W	R3957	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3851	1-216-809-11	RES-CHIP	100	5%	1/16W	R3958	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3852	1-218-675-11	METAL CHIP	200	0.50%	1/16W	R3959	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3854	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R3960	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3857	1-216-809-11	RES-CHIP	100	5%	1/16W	R3961	1-208-755-11	METAL CHIP	75	0.50%	1/10W
R3858	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W	<b>RESISTOR BRIDGE</b>					
R3862	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	RB3301	1-234-525-21	RES, CHIP NETWORK	56		
R3863	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W	RB3302	1-234-525-21	RES, CHIP NETWORK	56		
R3864	1-216-827-11	RES-CHIP	3.3K	5%	1/16W	RB3303	1-234-525-21	RES, CHIP NETWORK	56		
R3865	1-216-809-11	RES-CHIP	100	5%	1/16W	RB3304	1-234-525-21	RES, CHIP NETWORK	56		
R3866	1-414-234-22	FERRITE	0μH			RB3305	1-234-525-21	RES, CHIP NETWORK	56		
R3867	1-414-234-22	FERRITE	0μH			RB3306	1-234-525-21	RES, CHIP NETWORK	56		
R3868	1-414-234-22	FERRITE	0μH			RB3307	1-234-525-21	RES, CHIP NETWORK	56		
R3869	1-218-719-11	METAL CHIP	13K	0.50%	1/16W	RB3401	1-234-524-21	RES, CHIP NETWORK	33		
R3870	1-218-719-11	METAL CHIP	13K	0.50%	1/16W	RB3402	1-234-524-21	RES, CHIP NETWORK	33		
R3871	1-218-719-11	METAL CHIP	13K	0.50%	1/16W	RB3403	1-234-524-21	RES, CHIP NETWORK	33		
R3872	1-211-990-11	METAL CHIP	75	0.50%	1/16W	RB3404	1-234-524-21	RES, CHIP NETWORK	33		
R3873	1-211-990-11	METAL CHIP	75	0.50%	1/16W	RB3405	1-234-524-21	RES, CHIP NETWORK	33		
R3874	1-211-990-11	METAL CHIP	75	0.50%	1/16W						

**A**



*	4-374-846-11	COVER,CAPACITOR, CAP TYPE
	4-382-854-01	SCREW (M3X8), P, SW (+)

### CAPACITOR

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C238	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C748	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C239	1-126-964-11	ELECT	10μF	20%	50V	 C6002	1-136-346-21	MYLAR	0.22μF	20%	125V
C240	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C6003	1-117-227-11	MYLAR	1μF	10%	450V
C241	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C6004	1-126-961-11	ELECT	2.2μF	20%	50V
C242	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C6005	1-126-961-11	ELECT	2.2μF	20%	50V
C243	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V	C6006	1-126-967-11	ELECT	47μF	20%	50V
C244	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V	C6007	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V
C245	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V	C6008	1-126-968-11	ELECT	100μF	20%	50V
C246	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C6009	1-126-947-11	ELECT	47μF	20%	25V
C247	1-126-933-11	ELECT	100μF	20%	16V	C6011	1-126-968-11	ELECT	100μF	20%	50V
C248	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V	C6013	1-119-887-51	CERAMIC	1000pF	20%	250V
C249	1-126-967-11	ELECT	47μF	20%	50V	C6014	1-135-945-21	FILM	10000pF	3%	800V
C250	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V	C6015	1-130-495-00	MYLAR	0.1μF	5%	50V
C251	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V	C6017	1-125-969-91	CERAMIC	680pF	10%	1KV
C252	1-126-933-11	ELECT	100μF	20%	16V	C6018	1-126-929-11	ELECT	4700μF	20%	10V
C253	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	C6019	1-128-546-11	ELECT	10000μF	20%	10V
C254	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V	C6020	1-126-936-11	ELECT	3300μF	20%	16V
C255	1-163-243-11	CERAMIC CHIP	47pF	5%	50V	C6021	1-163-037-11	CERAMIC CHIP	0.022μF	10%	50V
C256	1-163-243-11	CERAMIC CHIP	47pF	5%	50V	C6026	1-126-933-11	ELECT	100μF	20%	16V
C257	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V	C6027	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C258	1-164-346-11	CERAMIC CHIP	1μF		16V	 C6029	1-136-311-11	MYLAR	0.47μF	20%	125V
C259	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V	C6030	1-126-935-11	ELECT	470μF	20%	16V
C260	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C6033	1-126-941-11	ELECT	470μF	20%	25V
C261	1-126-933-11	ELECT	100μF	20%	16V	C6045	1-126-926-11	ELECT	1000μF	20%	10V
C262	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C6048	1-126-767-11	ELECT	1000μF	20%	16V
C701	1-164-489-11	CERAMIC CHIP	0.22μF	10%	16V	C6057	1-126-916-11	ELECT	1000μF	20%	6.3V
C702	1-126-947-11	ELECT	47μF	20%	16V	C6059	1-126-971-11	ELECT	470μF	20%	50V
C703	1-126-947-11	ELECT	47μF	20%	16V	C6060	1-135-573-51	ELECT	15000μF	20%	25V
C705	1-164-346-11	CERAMIC CHIP	1μF		16V	C6061	1-126-960-11	ELECT	1μF	20%	50V
C708	1-164-346-11	CERAMIC CHIP	1μF		16V	C6062	1-126-947-11	ELECT	47μF	20%	25V
C710	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	C6063	1-136-479-11	FILM	0.001μF	2%	50V
C711	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V	C6064	1-126-964-11	ELECT	10μF	20%	50V
C712	1-126-947-11	ELECT	47μF	20%	16V	C6065	1-126-933-11	ELECT	100μF	20%	16V
C713	1-164-690-91	CERAMIC CHIP	0.0022μF	5%	50V	C7001	1-126-961-11	ELECT	2.2μF	20%	50V
C715	1-126-964-11	ELECT	10μF	20%	50V	C7006	1-126-767-11	ELECT	1000μF	20%	16V
C717	1-163-031-91	CERAMIC CHIP	0.01μF		50V	C7007	1-136-169-00	FILM	0.22μF	5%	50V
C718	1-163-235-11	CERAMIC CHIP	22pF	5%	50V	C7008	1-126-767-11	ELECT	1000μF	20%	16V
C719	1-163-235-11	CERAMIC CHIP	22pF	5%	50V	C7009	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C720	1-126-935-11	ELECT	470μF	20%	16V	C7010	1-126-963-11	ELECT	4.7μF	20%	50V
C721	1-163-231-11	CERAMIC CHIP	15pF	5%	50V	C7011	1-126-959-11	ELECT	0.47μF	20%	50V
C722	1-163-231-11	CERAMIC CHIP	15pF	5%	50V	C7012	1-163-017-00	CERAMIC CHIP	0.001μF	10%	50V
C724	1-126-961-11	ELECT	2.2μF	20%	50V	C7013	1-164-182-11	CERAMIC CHIP	0.01μF	10%	50V
C731	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	C7014	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V
C732	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	C7015	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V
C733	1-163-031-91	CERAMIC CHIP	0.01μF		50V	C7016	1-126-959-11	ELECT	0.47μF	20%	50V
C735	1-163-275-11	CERAMIC CHIP	0.001μF	5%	50V	C7017	1-126-963-11	ELECT	4.7μF	20%	50V
C747	1-126-767-11	ELECT	1000μF	20%	16V	C7018	1-136-169-00	FILM	0.22μF	5%	50V
						C7019	1-163-017-00	CERAMIC CHIP	0.001μF	10%	50V





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C7020	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V	C7105	1-126-935-11	ELECT	470μF	20%	16V
C7021	1-164-182-11	CERAMIC CHIP	0.01μF	10%	50V	C7108	1-126-961-11	ELECT	2.2μF	20%	50V
C7022	1-163-989-11	CERAMIC CHIP	0.033μF	10%	25V	C7109	1-126-961-11	ELECT	2.2μF	20%	50V
C7023	1-126-935-11	ELECT	470μF	20%	16V	C7110	1-126-941-11	ELECT	470μF	20%	25V
C7024	1-126-935-11	ELECT	470μF	20%	16V	C7151	1-126-967-11	ELECT	47μF	20%	50V
						C7152	1-126-967-11	ELECT	47μF	20%	50V
C7025	1-126-960-11	ELECT	1μF	20%	50V	<b>CONNECTOR</b>					
C7026	1-126-960-11	ELECT	1μF	20%	50V	* CN001	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P			
C7028	1-136-165-00	FILM	0.1μF	5%	50V	* CN003	1-785-304-11	CONNECTOR, DIN (RECEPTACLE) 64			
C7029	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	* CN201	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
C7030	1-126-953-11	ELECT	2200μF	20%	35V	* CN202	1-764-333-11	PLUG,CONNECTOR 10P			
						* CN203	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
C7032	1-163-038-91	CERAMIC CHIP	0.1μF		25V	* CN204	1-564-506-11	PLUG,CONNECTOR 3P			
C7033	1-126-934-11	ELECT	220μF	20%	16V	* CN701	1-564-515-11	PLUG,CONNECTOR 12P			
C7034	1-136-165-00	FILM	0.1μF	5%	50V	* CN702	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
C7035	1-136-165-00	FILM	0.1μF	5%	50V	* CN703	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
C7036	1-126-942-61	ELECT	1000μF	20%	25V	* CN705	1-564-508-11	PLUG,CONNECTOR 5P			
C7037	1-136-160-00	FILM	0.015μF	5%	50V	* CN706	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
C7038	1-126-942-61	ELECT	1000μF	20%	25V	* CN707	1-564-507-11	PLUG,CONNECTOR 4P			
C7039	1-136-160-00	FILM	0.015μF	5%	50V	* CN6001	1-766-241-11	PIN,CONNECTOR (PC BOARD) 3P			
C7056	1-126-953-11	ELECT	2200μF	20%	35V	* CN6002	1-766-241-11	PIN,CONNECTOR (PC BOARD) 3P			
C7057	1-126-953-11	ELECT	2200μF	20%	35V	* CN6003	1-508-786-00	PIN,CONNECTOR (5MM PITCH) 2P			
C7058	1-126-960-11	ELECT	1μF	20%	50V	* CN6005	1-766-176-11	PIN,CONNECTOR (PC BOARD) 6P			
C7059	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	* CN6006	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
C7061	1-126-964-11	ELECT	10μF	20%	50V	CN6007	1-580-843-11	PIN,CONNECTOR (POWER)			
C7062	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	* CN6013	1-766-240-11	PIN,CONNECTOR (PC BOARD) 2P			
C7063	1-136-165-00	FILM	0.1μF	5%	50V	* CN7001	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P			
						* CN7003	1-564-511-11	PLUG,CONNECTOR 8P			
C7064	1-126-953-11	ELECT	2200μF	20%	35V	* CN7008	1-564-511-61	PLUG,CONNECTOR 8P			
C7066	1-136-165-00	FILM	0.1μF	5%	50V	<b>DIODE</b>					
C7067	1-136-165-00	FILM	0.1μF	5%	50V	D004	8-719-977-28	DIODE UDZSTE-1710B			
C7069	1-136-165-00	FILM	0.039μF	5%	50V	D008	8-719-977-28	DIODE UDZSTE-1710B			
C7070	1-136-165-00	FILM	0.039μF	5%	50V	D203	8-719-025-31	DIODE 02CZ5.6-TE85L			
						D211	8-719-991-33	DIODE 1SS133T-77			
C7071	1-137-437-11	MYLAR	0.0022μF	5%	50V	D212	8-719-404-50	DIODE MA111-TX			
C7072	1-137-437-11	MYLAR	0.0022μF	5%	50V						
C7074	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	D214	8-719-404-50	DIODE MA111-TX			
C7075	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	D215	8-719-404-50	DIODE MA111-TX			
C7076	1-126-968-11	ELECT	100μF	20%	50V	D701	8-719-914-43	DIODE DAN202K-T-146			
						D703	8-719-914-43	DIODE DAN202K-T-146			
C7077	1-126-960-11	ELECT	1μF	20%	50V	D705	8-719-404-50	DIODE MA111-TX			
C7078	1-126-960-11	ELECT	1μF	20%	50V						
C7084	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V	D706	8-719-914-43	DIODE DAN202K-T-146			
C7088	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	D707	8-719-914-43	DIODE DAN202K-T-146			
C7089	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	D708	8-719-404-50	DIODE MA111-TX			
						D709	8-719-991-33	DIODE 1SS133T-77			
C7090	1-126-947-11	ELECT	47μF	20%	25V	D710	8-719-914-43	DIODE DAN202K-T-146			
C7094	1-126-960-11	ELECT	1μF	20%	50V						
C7095	1-126-960-11	ELECT	1μF	20%	50V	D711	8-719-914-44	DIODE DAP202K-T-146			
C7096	1-126-960-11	ELECT	1μF	20%	50V	D715	8-719-914-43	DIODE DAN202K-T-146			
C7099	1-126-964-11	ELECT	10μF	20%	50V	D716	8-719-914-44	DIODE DAP202K-T-146			
C7101	1-126-935-11	ELECT	470μF	20%	16V						
C7102	1-126-934-11	ELECT	220μF	20%	16V						
C7103	1-163-038-91	CERAMIC CHIP	0.1μF		25V						

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.




REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
D719	8-719-404-50	DIODE MA111-TX		<b>FUSE HOLDER</b>			
D720	8-719-404-50	DIODE MA111-TX		FH6001	1-533-223-11	HOLDER, FUSE	
D721	8-719-404-50	DIODE MA111-TX		FH6002	1-533-223-11	HOLDER, FUSE	
D722	8-719-404-50	DIODE MA111-TX		<b>IC</b>			
D723	8-719-914-43	DIODE DAN202K-T-146		IC201	8-752-100-25	IC CXA2150AQ	
D724	8-719-404-50	DIODE MA111-TX		IC701	6-800-051-01	IC M306V2ME-153FP	
D725	8-719-404-50	DIODE MA111-TX		IC702	8-759-349-11	IC PST9145NL	
D726	8-719-404-50	DIODE MA111-TX		IC707	8-759-672-78	IC M24C08-BN6(A)	
D727	8-719-404-50	DIODE MA111-TX		IC6001	8-759-670-30	IC MCZ3001D	
D728	8-719-404-50	DIODE MA111-TX		IC6002	8-759-140-85	IC UPC1093J-T	
D6001	8-719-991-33	DIODE 1SS133T-77		IC6003	8-759-520-49	IC PQ30RV21	
D6002	8-719-991-33	DIODE 1SS133T-77		IC6007	8-759-513-71	IC PQ05RF21	
D6003	8-719-979-64	DIODE $\mu$ F4005PKG23		IC6010	8-759-653-07	IC PQ09RD21	
D6005	8-719-063-73	DIODE D1NL20U-TR		IC6011	8-759-450-47	IC BA05T	
D6009	8-719-063-73	DIODE D1NL20U-TR		IC7001	8-759-678-92	IC BH3868AFS-E2	
D6011	8-719-031-79	DIODE D5SC4M		IC7002	8-759-246-70	IC TA8216H	
D6012	8-719-031-79	DIODE D5SC4M		IC7005	8-759-246-70	IC TA8216H	
D6013	8-719-031-79	DIODE D5SC4M		IC7006	8-759-331-71	IC NJM4558E(TE2)	
D6014	8-719-921-63	DIODE MTZJ-T-77-7.5B		IC7007	8-759-331-71	IC NJM4558E(TE2)	
D6017	8-719-921-37	DIODE MTZJ-T-77-4.7		<b>COIL</b>			
D6018	8-719-991-33	DIODE 1SS133T-77		L001	1-469-320-21	INDUCTOR	100 $\mu$ H
D6020	8-719-511-40	DIODE S1VB20		L002	1-469-320-21	INDUCTOR	100 $\mu$ H
D6025	8-719-404-50	DIODE MA111-TX		L003	1-469-317-21	INDUCTOR	10 $\mu$ H
D7002	8-719-991-33	DIODE 1SS133T-77		L004	1-469-320-21	INDUCTOR	100 $\mu$ H
D7003	8-719-914-43	DIODE DAN202K-T-146		L005	1-469-320-21	INDUCTOR	100 $\mu$ H
D7004	8-719-914-44	DIODE DAP202K-T-146		L006	1-469-317-21	INDUCTOR	10 $\mu$ H
D7005	8-719-071-74	DIODE HZU11B1TRF		L201	1-469-317-21	INDUCTOR	10 $\mu$ H
D7009	8-719-404-50	DIODE MA111-TX		L202	1-469-317-21	INDUCTOR	10 $\mu$ H
D7010	8-719-404-50	DIODE MA111-TX		L203	1-469-317-21	INDUCTOR	10 $\mu$ H
D7011	8-719-404-50	DIODE MA111-TX		L701	1-412-911-11	FERRITE	0 $\mu$ H
D7012	8-719-404-50	DIODE MA111-TX		L702	1-412-911-11	FERRITE	0 $\mu$ H
D7013	8-719-041-97	DIODE MA113-(TX)		L703	1-414-179-21	INDUCTOR	2.2 $\mu$ H
D7014	8-719-924-13	DIODE MTZJ-T-77-22B		L6001	1-406-665-11	INDUCTOR	100 $\mu$ H
D7015	8-719-924-13	DIODE MTZJ-T-77-22B		L6002	1-406-659-11	INDUCTOR	10 $\mu$ H
D7016	8-719-041-97	DIODE MA113-(TX)		L6003	1-406-659-11	INDUCTOR	10 $\mu$ H
D7017	8-719-041-97	DIODE MA113-(TX)		L6004	1-412-525-31	INDUCTOR	10 $\mu$ H
D7103	8-719-404-50	DIODE MA111-TX		L6006	1-412-519-11	INDUCTOR	3.3 $\mu$ H
<b>FUSE</b>				L6007	1-412-519-11	INDUCTOR	3.3 $\mu$ H
⚠ F6001	1-532-506-51	FUSE	6.3A/250V	L6008	1-469-317-21	INDUCTOR	10 $\mu$ H
<b>FERRITE BEAD</b>				L7002	1-414-187-11	INDUCTOR	47 $\mu$ H
FB6001	1-412-911-11	FERRITE	0 $\mu$ H	<b>PHOTO COUPLER</b>			
FB6003	1-412-911-11	FERRITE	0 $\mu$ H	PH6001	8-749-924-35	PHOTO COUPLER ON3171-R	
FB6004	1-412-911-11	FERRITE	0 $\mu$ H	<b>TRANSISTOR</b>			
FB6005	1-412-911-11	FERRITE	0 $\mu$ H	Q001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FB6007	1-412-911-11	FERRITE	0 $\mu$ H	Q002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
⚠ FB6012	1-412-911-11	FERRITE	0 $\mu$ H	Q004	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
⚠ FB6013	1-412-911-11	FERRITE	0 $\mu$ H				




REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
Q005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		Q7016	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q012	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			<b>RESISTOR</b>		
Q015	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R004	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q027	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R005	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q203	8-729-122-63	TRANSISTOR 2SA1226-T1E4		R006	1-216-295-91	SHORT	
Q204	8-729-122-63	TRANSISTOR 2SA1226-T1E4		R007	1-216-017-91	RES-CHIP	47 5% 1/10W
Q207	8-729-122-63	TRANSISTOR 2SA1226-T1E4		R008	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q208	8-729-122-63	TRANSISTOR 2SA1226-T1E4					
Q209	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R009	1-216-017-91	RES-CHIP	47 5% 1/10W
Q211	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R010	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q212	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R011	1-216-113-00	RES-CHIP	470K 5% 1/10W
Q214	1-801-806-11	TRANSISTOR DTC144EKA-T146		R012	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q216	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R013	1-216-081-00	RES-CHIP	22K 5% 1/10W
Q217	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX					
Q701	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R014	1-216-085-91	RES-CHIP	33K 5% 1/10W
Q702	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R015	1-208-776-11	METAL CHIP	560 0.50% 1/10W
Q703	1-801-806-11	TRANSISTOR DTC144EKA-T146		R016	1-216-025-11	RES-CHIP	100 5% 1/10W
Q704	1-801-806-11	TRANSISTOR DTC144EKA-T146		R017	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q705	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R037	1-216-295-91	SHORT	
Q706	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX					
Q707	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R039	1-216-025-11	RES-CHIP	100 5% 1/10W
Q709	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R042	1-216-025-11	RES-CHIP	100 5% 1/10W
Q710	8-729-027-23	TRANSISTOR DTA114EKA-T146		R049	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q712	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R052	1-216-085-91	RES-CHIP	33K 5% 1/10W
Q717	1-801-806-11	TRANSISTOR DTC144EKA-T146		R055	1-216-081-00	RES-CHIP	22K 5% 1/10W
Q721	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX					
Q723	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R061	1-208-776-11	METAL CHIP	560 0.50% 1/10W
Q724	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R065	1-216-025-11	RES-CHIP	100 5% 1/10W
Q726	8-729-901-47	TRANSISTOR DTA143EKA-T146		R082	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q727	8-729-901-47	TRANSISTOR DTA143EKA-T146		R083	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q728	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R160	1-216-113-00	RES-CHIP	470K 5% 1/10W
Q729	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX					
Q730	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R163	1-216-642-11	METAL CHIP	430 0.50% 1/10W
Q731	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R164	1-216-041-00	RES-CHIP	470 5% 1/10W
Q6001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R165	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q6002	8-729-027-23	TRANSISTOR DTA114EKA-T146		R166	1-216-097-11	RES-CHIP	100K 5% 1/10W
Q6007	8-729-052-29	TRANSISTOR 2SK2876-01MR-F122		R167	1-216-121-11	RES-CHIP	1M 5% 1/10W
Q6008	8-729-052-29	TRANSISTOR 2SK2876-01MR-F122					
Q6009	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R168	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q6010	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R169	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q7001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R170	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q7004	8-729-900-53	TRANSISTOR DTC114EKA-T146		R171	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q7005	8-729-900-53	TRANSISTOR DTC114EKA-T146		R172	1-216-097-11	RES-CHIP	100K 5% 1/10W
Q7009	8-729-900-53	TRANSISTOR DTC114EKA-T146					
Q7010	8-729-900-53	TRANSISTOR DTC114EKA-T146		R173	1-216-121-11	RES-CHIP	1M 5% 1/10W
Q7013	8-729-900-53	TRANSISTOR DTC114EKA-T146		R174	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q7014	8-729-900-53	TRANSISTOR DTC114EKA-T146		R175	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q7015	8-729-900-53	TRANSISTOR DTC114EKA-T146		R176	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
				R204	1-216-073-91	RES-CHIP	10K 5% 1/10W
				R205	1-216-025-11	RES-CHIP	100 5% 1/10W
				R206	1-208-752-11	METAL CHIP	56 0.50% 1/10W
				R207	1-249-413-11	CARBON	470 5% 1/4W
				R208	1-216-295-91	SHORT	
				R210	1-216-025-11	RES-CHIP	100 5% 1/10W






REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R211	1-208-752-11	METAL CHIP	56	0.50%	1/10W	R276	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R215	1-249-413-11	CARBON	470	5%	1/4W	R277	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R219	1-216-025-11	RES-CHIP	100	5%	1/10W	R278	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R220	1-208-752-11	METAL CHIP	56	0.50%	1/10W	R280	1-216-295-91	SHORT			
R221	1-249-413-11	CARBON	470	5%	1/4W						
R223	1-216-025-11	RES-CHIP	100	5%	1/10W	R281	1-216-295-91	SHORT			
R226	1-216-073-91	RES-CHIP	10K	5%	1/10W	R282	1-216-295-91	SHORT			
R228	1-216-025-11	RES-CHIP	100	5%	1/10W	R283	1-216-295-91	SHORT			
R229	1-216-025-11	RES-CHIP	100	5%	1/10W	R284	1-216-295-91	SHORT			
						R701	1-216-089-91	RES-CHIP	47K	5%	1/10W
R230	1-216-025-11	RES-CHIP	100	5%	1/10W	R702	1-216-097-11	RES-CHIP	100K	5%	1/10W
R231	1-216-025-11	RES-CHIP	100	5%	1/10W	R703	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R232	1-216-025-11	RES-CHIP	100	5%	1/10W	R704	1-216-073-91	RES-CHIP	10K	5%	1/10W
R233	1-216-025-11	RES-CHIP	100	5%	1/10W	R705	1-216-101-00	RES-CHIP	150K	5%	1/10W
R234	1-216-025-11	RES-CHIP	100	5%	1/10W	R706	1-216-073-91	RES-CHIP	10K	5%	1/10W
R235	1-216-025-11	RES-CHIP	100	5%	1/10W	R707	1-216-097-11	RES-CHIP	100K	5%	1/10W
R236	1-216-025-11	RES-CHIP	100	5%	1/10W	R708	1-216-025-11	RES-CHIP	100	5%	1/10W
R237	1-216-025-11	RES-CHIP	100	5%	1/10W	R709	1-216-097-11	RES-CHIP	100K	5%	1/10W
R238	1-216-025-11	RES-CHIP	100	5%	1/10W	R710	1-216-073-91	RES-CHIP	10K	5%	1/10W
R239	1-216-059-00	RES-CHIP	2.7K	5%	1/10W	R711	1-216-073-91	RES-CHIP	10K	5%	1/10W
R240	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	R712	1-216-049-11	RES-CHIP	1K	5%	1/10W
R241	1-216-133-91	RES-CHIP	3.3M	5%	1/10W	R713	1-216-025-11	RES-CHIP	100	5%	1/10W
R242	1-216-075-00	RES-CHIP	12K	5%	1/10W	R714	1-216-025-11	RES-CHIP	100	5%	1/10W
R243	1-216-073-91	RES-CHIP	10K	5%	1/10W	R719	1-216-049-11	RES-CHIP	1K	5%	1/10W
R244	1-216-025-11	RES-CHIP	100	5%	1/10W	R721	1-216-049-11	RES-CHIP	1K	5%	1/10W
R245	1-216-073-91	RES-CHIP	10K	5%	1/10W	R727	1-216-049-11	RES-CHIP	1K	5%	1/10W
R246	1-216-073-91	RES-CHIP	10K	5%	1/10W	R729	1-216-049-11	RES-CHIP	1K	5%	1/10W
R247	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R731	1-216-073-91	RES-CHIP	10K	5%	1/10W
R248	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R740	1-216-073-91	RES-CHIP	10K	5%	1/10W
R249	1-216-025-11	RES-CHIP	100	5%	1/10W	R741	1-216-073-91	RES-CHIP	10K	5%	1/10W
R250	1-216-097-11	RES-CHIP	100K	5%	1/10W	R742	1-216-041-00	RES-CHIP	470	5%	1/10W
R251	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R743	1-216-025-11	RES-CHIP	100	5%	1/10W
R252	1-216-025-11	RES-CHIP	100	5%	1/10W	R744	1-216-049-11	RES-CHIP	1K	5%	1/10W
R253	1-216-043-91	RES-CHIP	560	5%	1/10W	R748	1-216-081-00	RES-CHIP	22K	5%	1/10W
R255	1-216-025-11	RES-CHIP	100	5%	1/10W	R749	1-216-049-11	RES-CHIP	1K	5%	1/10W
R256	1-216-041-00	RES-CHIP	470	5%	1/10W	R754	1-216-025-11	RES-CHIP	100	5%	1/10W
R257	1-216-017-91	RES-CHIP	47	5%	1/10W	R755	1-216-025-11	RES-CHIP	100	5%	1/10W
R258	1-216-017-91	RES-CHIP	47	5%	1/10W	R756	1-216-025-11	RES-CHIP	100	5%	1/10W
R259	1-216-017-91	RES-CHIP	47	5%	1/10W	R757	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R260	1-216-037-00	RES-CHIP	330	5%	1/10W	R758	1-216-025-11	RES-CHIP	100	5%	1/10W
R261	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R762	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R262	1-216-025-11	RES-CHIP	100	5%	1/10W	R763	1-216-295-91	SHORT			
R263	1-216-071-00	RES-CHIP	8.2K	5%	1/10W	R764	1-216-049-11	RES-CHIP	1K	5%	1/10W
R264	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R767	1-216-049-11	RES-CHIP	1K	5%	1/10W
R265	1-216-073-91	RES-CHIP	10K	5%	1/10W	R769	1-216-049-11	RES-CHIP	1K	5%	1/10W
R266	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R771	1-216-049-11	RES-CHIP	1K	5%	1/10W
R267	1-216-073-91	RES-CHIP	10K	5%	1/10W	R772	1-216-081-00	RES-CHIP	22K	5%	1/10W
R274	1-216-025-11	RES-CHIP	100	5%	1/10W	R773	1-216-081-00	RES-CHIP	22K	5%	1/10W
R275	1-216-069-00	RES-CHIP	6.8K	5%	1/10W	R774	1-216-081-00	RES-CHIP	22K	5%	1/10W


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.


NOTE: Les composants identifiés par un trame et une  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.









REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R776	1-216-049-11	RES-CHIP	1K	5%	1/10W	R842	1-216-081-00	RES-CHIP	22K	5%	1/10W
R777	1-216-073-91	RES-CHIP	10K	5%	1/10W	R843	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R780	1-216-073-91	RES-CHIP	10K	5%	1/10W	R847	1-216-025-11	RES-CHIP	100	5%	1/10W
R781	1-216-025-11	RES-CHIP	100	5%	1/10W	R848	1-216-025-11	RES-CHIP	100	5%	1/10W
R784	1-216-025-11	RES-CHIP	100	5%	1/10W	R849	1-216-295-91	SHORT			
R785	1-216-049-11	RES-CHIP	1K	5%	1/10W	R850	1-216-295-91	SHORT			
R787	1-216-121-11	RES-CHIP	1M	5%	1/10W	R851	1-216-295-91	SHORT			
R788	1-216-295-91	SHORT				R852	1-216-049-11	RES-CHIP	1K	5%	1/10W
R789	1-216-041-00	RES-CHIP	470	5%	1/10W	R853	1-216-295-91	SHORT			
R791	1-216-025-11	RES-CHIP	100	5%	1/10W	R854	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R792	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R856	1-216-049-11	RES-CHIP	1K	5%	1/10W
R793	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R857	1-216-025-11	RES-CHIP	100	5%	1/10W
R794	1-216-017-91	RES-CHIP	47	5%	1/10W	R858	1-216-295-91	SHORT			
R795	1-216-025-11	RES-CHIP	100	5%	1/10W	R859	1-216-295-91	SHORT			
R796	1-216-295-91	SHORT				R860	1-216-689-11	RES-CHIP	39K	5%	1/10W
R797	1-216-017-91	RES-CHIP	47	5%	1/10W	R861	1-216-689-11	RES-CHIP	39K	5%	1/10W
R798	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R862	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R799	1-216-049-11	RES-CHIP	1K	5%	1/10W	R863	1-216-049-11	RES-CHIP	1K	5%	1/10W
R800	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R864	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R801	1-216-025-11	RES-CHIP	100	5%	1/10W	R865	1-216-295-91	SHORT			
R802	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R866	1-216-295-91	SHORT			
R803	1-216-017-91	RES-CHIP	47	5%	1/10W	R867	1-216-081-00	RES-CHIP	22K	5%	1/10W
R804	1-216-037-00	RES-CHIP	330	5%	1/10W	R6001	1-216-073-91	RES-CHIP	10K	5%	1/10W
R805	1-216-037-00	RES-CHIP	330	5%	1/10W	R6002	1-249-393-11	CARBON	10	5%	1/4W
R806	1-216-037-00	RES-CHIP	330	5%	1/10W	 R6003	1-219-776-11	CARBON	2.2M	10%	1/2W
R807	1-216-017-91	RES-CHIP	47	5%	1/10W	R6004	1-216-121-11	RES-CHIP	1M	5%	1/10W
R808	1-216-049-11	RES-CHIP	1K	5%	1/10W	R6006	1-220-926-11	FUSIBLE	0.47	10%	1/2W
R812	1-216-049-11	RES-CHIP	1K	5%	1/10W	R6007	1-215-481-00	METAL	330K	1%	1/4W
R813	1-216-049-11	RES-CHIP	1K	5%	1/10W	R6008	1-215-481-00	METAL	330K	1%	1/4W
R814	1-216-025-11	RES-CHIP	100	5%	1/10W	R6009	1-215-481-00	METAL	330K	1%	1/4W
R815	1-216-025-11	RES-CHIP	100	5%	1/10W	R6010	1-249-393-11	CARBON	10	5%	1/4W
R816	1-216-025-11	RES-CHIP	100	5%	1/10W	R6011	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R817	1-216-025-11	RES-CHIP	100	5%	1/10W	R6012	1-216-049-11	RES-CHIP	1K	5%	1/10W
R818	1-216-025-11	RES-CHIP	100	5%	1/10W	R6015	1-216-049-11	RES-CHIP	1K	5%	1/10W
R819	1-216-037-00	RES-CHIP	330	5%	1/10W	R6019	1-216-073-91	RES-CHIP	10K	5%	1/10W
R822	1-216-037-00	RES-CHIP	330	5%	1/10W	R6020	1-216-049-11	RES-CHIP	1K	5%	1/10W
R824	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	R6021	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R825	1-216-025-11	RES-CHIP	100	5%	1/10W	R6022	1-208-803-11	METAL CHIP	7.5K	0.50%	1/10W
R827	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	R6025	1-249-417-11	CARBON	1K	5%	1/4W
R828	1-216-073-91	RES-CHIP	10K	5%	1/10W	R6029	1-216-105-91	RES-CHIP	220K	5%	1/10W
R829	1-216-073-91	RES-CHIP	10K	5%	1/10W	R6038	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R830	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R6039	1-208-812-11	METAL CHIP	18K	0.50%	1/10W
R834	1-216-041-00	RES-CHIP	470	5%	1/10W	R6040	1-208-840-11	METAL CHIP	270K	0.50%	1/10W
R836	1-216-049-11	RES-CHIP	1K	5%	1/10W	 R6041	1-240-241-11	CEMENTED	0.47	5%	20W
R837	1-216-025-11	RES-CHIP	100	5%	1/10W	 R6042	1-240-241-11	CEMENTED	0.47	5%	20W
R838	1-216-049-11	RES-CHIP	1K	5%	1/10W	R6043	1-211-964-11	METAL CHIP	33	0.50%	1/10W
R839	1-216-025-11	RES-CHIP	100	5%	1/10W	R6044	1-249-393-11	CARBON	10	5%	1/4W
R841	1-216-033-00	RES-CHIP	220	5%	1/10W	R6046	1-216-073-91	RES-CHIP	10K	5%	1/10W



NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R6047	1-216-041-00	RES-CHIP	470	5%	1/10W	R7054	1-216-295-91	SHORT			
R6049	1-216-363-00	METAL OXIDE	0.33	5%	2W	R7055	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R6050	1-216-363-00	METAL OXIDE	0.33	5%	2W	R7056	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R6051	1-249-393-11	CARBON	10	5%	1/4W	R7058	1-249-429-11	CARBON	10K	5%	1/4W
R6052	1-216-073-91	RES-CHIP	10K	5%	1/10W	R7059	1-249-385-11	CARBON	2.2	5%	1/4W
R6053	1-215-907-11	METAL OXIDE	22	5%	3W	R7060	1-249-385-11	CARBON	2.2	5%	1/4W
R6055	1-216-033-00	RES-CHIP	220	5%	1/10W	R7061	1-216-295-91	SHORT			
R6056	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R7063	1-216-689-11	RES-CHIP	39K	5%	1/10W
R6058	1-208-758-11	METAL CHIP	100	0.50%	1/10W	R7064	1-216-049-11	RES-CHIP	1K	5%	1/10W
R6059	1-249-417-11	CARBON	1K	5%	1/4W	R7065	1-216-041-00	RES-CHIP	470	5%	1/10W
R6062	1-216-295-91	SHORT				R7067	1-216-049-11	RES-CHIP	1K	5%	1/10W
R6063	1-216-073-91	RES-CHIP	10K	5%	1/10W	R7068	1-216-041-00	RES-CHIP	470	5%	1/10W
R6064	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R7070	1-216-689-11	RES-CHIP	39K	5%	1/10W
R6065	1-216-049-11	RES-CHIP	1K	5%	1/10W	R7071	1-216-121-11	RES-CHIP	1M	5%	1/10W
 R6066	1-216-343-00	METAL OXIDE	0.33	5%	1W	R7083	1-249-429-11	CARBON	10K	5%	1/4W
R6067	1-216-049-11	RES-CHIP	1K	5%	1/10W	R7086	1-216-295-91	SHORT			
R6068	1-249-433-11	CARBON	22K	5%	1/4W	R7088	1-216-295-91	SHORT			
R7002	1-216-097-11	RES-CHIP	100K	5%	1/10W	R7090	1-216-089-91	RES-CHIP	47K	5%	1/10W
R7003	1-216-689-11	RES-CHIP	39K	5%	1/10W	R7091	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7004	1-216-689-11	RES-CHIP	39K	5%	1/10W	R7092	1-216-025-11	RES-CHIP	100	5%	1/10W
R7005	1-216-121-11	RES-CHIP	1M	5%	1/10W	R7093	1-216-025-11	RES-CHIP	100	5%	1/10W
R7006	1-216-089-91	RES-CHIP	47K	5%	1/10W	R7094	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7007	1-216-017-91	RES-CHIP	47	5%	1/10W	R7095	1-216-089-91	RES-CHIP	47K	5%	1/10W
R7008	1-216-085-91	RES-CHIP	33K	5%	1/10W	R7096	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R7009	1-216-295-91	SHORT				R7097	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R7010	1-216-295-91	SHORT				R7098	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R7011	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	R7099	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R7012	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	R7100	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7013	1-216-077-91	RES-CHIP	15K	5%	1/10W	R7101	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7014	1-249-429-11	CARBON	10K	5%	1/4W	R7103	1-216-049-11	RES-CHIP	1K	5%	1/10W
R7015	1-249-429-11	CARBON	10K	5%	1/4W	R7104	1-216-295-91	SHORT			
R7016	1-216-073-91	RES-CHIP	10K	5%	1/10W	<b>RELAY</b>					
R7017	1-216-073-91	RES-CHIP	10K	5%	1/10W	 RY6001	1-755-389-11	RELAY (AC POWER)			
R7018	1-216-073-91	RES-CHIP	10K	5%	1/10W	<b>TRANSFORMER</b>					
R7019	1-216-073-91	RES-CHIP	10K	5%	1/10W	 T6001	1-433-404-11	TRANSFORMER, LINE FILTER			
R7021	1-216-049-11	RES-CHIP	1K	5%	1/10W	 T6002	1-435-675-11	TRANSFORMER, STANDBY			
R7022	1-216-073-91	RES-CHIP	10K	5%	1/10W	T6003	1-435-577-11	TRANSFORMER, CONVERTER (PIT)			
R7023	1-249-385-11	CARBON	2.2	5%	1/4W	<b>THERMISTOR</b>					
R7024	1-216-049-11	RES-CHIP	1K	5%	1/10W	 TH6002	1-803-970-11	THERMISTOR, POSITIVE			
R7025	1-216-049-11	RES-CHIP	1K	5%	1/10W	<b>TUNER</b>					
R7026	1-249-385-11	CARBON	2.2	5%	1/4W	TU001	8-598-501-30	TUNER, FSS BTF-FA402			
R7045	1-216-081-00	RES-CHIP	22K	5%	1/10W	TU002	8-598-542-20	TUNER, FSS BTF-WA412			
R7046	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	<b>VARIATOR</b>					
R7047	1-216-041-00	RES-CHIP	470	5%	1/10W	 VD6001	1-801-074-11	VARIATOR ERZV10D271			
R7048	1-216-041-00	RES-CHIP	470	5%	1/10W						
R7051	1-216-295-91	SHORT									
R7052	1-216-077-91	RES-CHIP	15K	5%	1/10W						
R7053	1-216-049-11	RES-CHIP	1K	5%	1/10W						



NOTE: The components identified by shading and mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.




\*


REF. NO.	PART NO.	DESCRIPTION	VALUES		
CRYSTAL					
X201	1-760-895-21	VIBRATOR, CERAMIC			
X702	1-781-931-21	VIBRATOR, CRYSTAL			
C					
A-1332-075-A			C MOUNTED PC BOARD		
	7-682-647-09	SCREW+PS 3X6			
CAPACITOR					
C9001	1-126-940-11	ELECT	330μF	20%	25V
C9002	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9003	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9004	1-162-114-00	CERAMIC	0.0047μF		2KV
C9005	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9006	1-163-217-11	CERAMIC CHIP	1pF	0.25pF	50V
C9007	1-163-217-11	CERAMIC CHIP	1pF	0.25pF	50V
C9008	1-163-222-11	CERAMIC CHIP	5pF	0.25pF	50V
C9009	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9010	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9011	1-161-830-00	CERAMIC	0.0047μF		500V
C9012	1-161-830-00	CERAMIC	0.0047μF		500V
C9013	1-163-035-00	CERAMIC CHIP	0.047μF		50V
C9014	1-161-830-00	CERAMIC	0.0047μF		500V
C9015	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C9018	1-107-961-91	ELECT	10μF	20%	250V
C9019	1-163-035-00	CERAMIC CHIP	0.047μF		50V
C9020	1-107-961-91	ELECT	10μF	20%	250V
C9021	1-107-961-91	ELECT	10μF	20%	250V
C9022	1-101-004-00	CERAMIC	0.01μF		50V
C9023	1-101-004-00	CERAMIC	0.01μF		50V
C9024	1-163-035-00	CERAMIC CHIP	0.047μF		50V
C9025	1-104-653-11	ELECT	220μF	20%	16V
C9026	1-163-035-00	CERAMIC CHIP	0.047μF		50V
C9027	1-101-004-00	CERAMIC	0.01μF		50V
C9028	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C9029	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C9030	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C9031	1-162-116-00	CERAMIC	680pF	10%	2KV
C9032	1-162-116-00	CERAMIC	680pF	10%	2KV
C9033	1-107-662-11	ELECT	22μF	20%	250V
C9035	1-126-933-11	ELECT	100μF	20%	16V
C9036	1-126-964-11	ELECT	10μF	20%	50V
C9037	1-126-961-11	ELECT	2.2μF	20%	50V
C9038	1-126-963-11	ELECT	4.7μF	20%	50V
C9042	1-126-940-11	ELECT	330uF	20%	25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C9046	1-126-933-11	ELECT	100μF	20%	16V
C9047	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
<b>CONNECTOR</b>					
* CN9001	1-764-333-11	PLUG,CONNECTOR 10P			
* CN9002	1-766-242-11	PIN,CONNECTOR (PC BOARD) 4P			
CN9003	1-695-915-11	TAB (CONTACT)			
CN9004	1-695-915-11	TAB (CONTACT)			
<b>DIODE</b>					
D9001	8-719-991-33	DIODE 1SS133T-77			
D9002	8-719-400-75	DIODE MA3091-TX			
D9003	8-719-991-33	DIODE 1SS133T-77			
D9005	8-719-404-50	DIODE MA111-TX			
D9006	8-719-051-85	DIODE HSS83TD			
D9007	8-719-051-85	DIODE HSS83TD			
D9008	8-719-051-85	DIODE HSS83TD			
D9009	8-719-908-03	DIODE GP08DPKG23			
D9010	8-719-110-17	DIODE MTZJ-T-77-10			
D9013	8-719-991-33	DIODE 1SS133T-77			
D9014	8-719-991-33	DIODE 1SS133T-77			
D9015	8-719-991-33	DIODE 1SS133T-77			
D9016	8-719-991-33	DIODE 1SS133T-77			
D9017	8-719-991-33	DIODE 1SS133T-77			
<b>IC</b>					
IC9001	8-759-360-83	IC TDA6111Q/N4			
IC9002	8-759-360-83	IC TDA6111Q/N4			
IC9003	8-759-360-83	IC TDA6111Q/N4			
<b>JACK</b>					
J9001	1-451-470-21	SOCKET, CRT			
<b>COIL</b>					
L9002	1-408-591-11	INDUCTOR			1μH
L9003	1-408-591-11	INDUCTOR			1μH
L9004	1-408-591-11	INDUCTOR			1μH
L9005	1-406-666-21	INDUCTOR			150μH
L9006	1-412-525-31	INDUCTOR			10μH
<b>TRANSISTOR</b>					
Q9001	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9002	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q9003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q9004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q9005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q9008	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q9009	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9011	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q9012	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q9014	8-729-823-81	TRANSISTOR 2SC4632LS-CB7			



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
<b>RESISTOR</b>						R9070	1-249-411-11	CARBON	330	5%	1/4W
R9001	1-216-077-91	RES-CHIP	15K	5%	1/10W	R9071	1-249-411-11	CARBON	330	5%	1/4W
R9004	1-249-428-11	CARBON	8.2K	5%	1/4W	R9072	1-249-411-11	CARBON	330	5%	1/4W
R9005	1-249-421-11	CARBON	2.2K	5%	1/4W	R9073	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9006	1-249-429-11	CARBON	10K	5%	1/4W	R9076	1-219-769-11	CARBON	3.3M	5%	1/2W
R9007	1-208-789-11	METAL CHIP	2K	0.50%	1/10W						
						R9077	1-249-417-11	CARBON	1K	5%	1/4W
R9008	1-216-085-91	RES-CHIP	33K	5%	1/10W	R9078	1-249-427-11	CARBON	6.8K	5%	1/4W
R9009	1-249-429-11	CARBON	10K	5%	1/4W	R9079	1-249-426-11	CARBON	5.6K	5%	1/4W
R9010	1-249-429-11	CARBON	10K	5%	1/4W	R9081	1-247-843-11	CARBON	3.3K	5%	1/4W
R9012	1-249-417-11	CARBON	1K	5%	1/4W	R9083	1-249-436-11	CARBON	39K	5%	1/4W
R9013	1-216-049-11	RES-CHIP	1K	5%	1/10W						
						R9084	1-260-126-81	CARBON	180K	5%	1/2W
R9014	1-249-409-11	CARBON	220	5%	1/4W	R9085	1-260-126-81	CARBON	180K	5%	1/2W
R9015	1-249-409-11	CARBON	220	5%	1/4W	R9089	1-215-445-00	METAL	10K	1%	1/4W
R9016	1-249-409-11	CARBON	220	5%	1/4W	R9091	1-215-429-00	METAL	2.2K	1%	1/4W
R9018	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	<b>VARIABLE RESISTOR</b>					
R9019	1-216-063-91	RES-CHIP	3.9K	5%	1/10W						
						RV9001	1-241-714-11	RES, ADJ, METAL FILM	110M		
R9026	1-208-789-11	METAL CHIP	2K	0.50%	1/10W	RV9002	1-241-788-11	RES, ADJ, CARBON	100K		
R9031	1-208-789-11	METAL CHIP	2K	0.50%	1/10W	<div>DH</div>					
R9033	1-215-447-00	METAL	12K	1%	1/4W						
R9034	1-215-439-00	METAL	5.6K	1%	1/4W						
R9035	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W						
R9036	1-216-049-11	RES-CHIP	1K	5%	1/10W	*	A-1333-142-A	DH MOUNTED PC BOARD			
R9037	1-240-233-71	METAL OXIDE	100	5%	3W	<b>CAPACITOR</b>					
R9038	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W	C5801	1-126-964-11	ELECT	10μF	20%	50V
R9039	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W	C5804	1-102-129-00	CERAMIC	0.01μF	10%	50V
R9041	1-216-049-11	RES-CHIP	1K	5%	1/10W	C5805	1-126-964-11	ELECT	10μF	20%	50V
						C5807	1-102-129-00	CERAMIC	0.01μF	10%	50V
R9042	1-216-049-11	RES-CHIP	1K	5%	1/10W	C5816	1-126-964-11	ELECT	10μF	20%	50V
R9043	1-240-233-71	METAL OXIDE	100	5%	3W						
R9044	1-240-233-71	METAL OXIDE	100	5%	3W	C5819	1-126-960-11	ELECT	1μF	20%	50V
R9047	1-202-557-00	SOLID	220	20%	1/2W	C5822	1-136-165-00	FILM	0.1μF	5%	50V
R9048	1-216-049-11	RES-CHIP	1K	5%	1/10W	C5861	1-126-964-11	ELECT	10μF	20%	50V
R9049	1-216-049-11	RES-CHIP	1K	5%	1/10W	C5862	1-102-129-00	CERAMIC	0.01μF	10%	50V
R9050	1-249-424-11	CARBON	3.9K	5%	1/4W	C5863	1-126-964-11	ELECT	10μF	20%	50V
R9051	1-202-557-00	SOLID	220	20%	1/2W	C5865	1-126-960-11	ELECT	1μF	20%	50V
R9052	1-202-557-00	SOLID	220	20%	1/2W	C5866	1-102-129-00	CERAMIC	0.01μF	10%	50V
R9053	1-249-424-11	CARBON	3.9K	5%	1/4W	C5868	1-136-165-00	FILM	0.1μF	5%	50V
						<b>CONNECTOR</b>					
R9054	1-249-424-11	CARBON	3.9K	5%	1/4W	*	CN5802	1-564-508-11	PLUG,CONNECTOR 5P		
R9055	1-260-126-81	CARBON	180K	5%	1/2W	*	CN5803	1-564-507-11	PLUG,CONNECTOR 4P		
R9056	1-202-549-00	SOLID	100	20%	1/2W	*	CN5861	1-564-506-11	PLUG,CONNECTOR 3P		
R9057	1-202-847-00	SOLID	560K	20%	1/2W	*	CN5862	1-564-506-11	PLUG,CONNECTOR 3P		
R9059	1-202-818-00	SOLID	1K	20%	1/2W	<b>DIODE</b>					
R9061	1-202-549-00	SOLID	100	20%	1/2W	D5805	8-719-991-33	DIODE 1SS133T-77			
R9062	1-260-123-11	CARBON	100K	5%	1/2W	D5860	8-719-991-33	DIODE 1SS133T-77			
R9063	1-260-123-11	CARBON	100K	5%	1/2W						
R9064	1-260-126-81	CARBON	180K	5%	1/2W						
R9065	1-249-425-11	CARBON	4.7K	5%	1/4W						
R9067	1-219-769-11	CARBON	3.3M	5%	1/2W						
R9068	1-216-101-00	RES-CHIP	150K	5%	1/10W						

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES				REF. NO.	PART NO.	DESCRIPTION	VALUES			
<b>IC</b>						R5862	1-249-417-11	CARBON	1K	5%	1/4W		
IC5805	8-759-822-38	IC LA6510				R5863	1-249-417-11	CARBON	1K	5%	1/4W		
IC5861	8-759-822-38	IC LA6510				R5864	1-215-413-00	METAL	470	1%	1/4W		
IC5870	1-418-473-11	SENSOR, MAGNETIC	MIU-212			R5865	1-249-429-11	CARBON	10K	5%	1/4W		
<b>TRANSISTOR</b>						R5867	1-249-417-11	CARBON	1K	5%	1/4W		
Q5807	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5868	1-249-429-11	CARBON	10K	5%	1/4W		
Q5808	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5869	1-249-429-11	CARBON	10K	5%	1/4W		
Q5809	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5871	1-249-411-11	CARBON	330	5%	1/4W		
Q5810	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA				R5873	1-249-441-11	CARBON	100K	5%	1/4W		
Q5811	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5874	1-249-437-11	CARBON	47K	5%	1/4W		
Q5812	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5876	1-249-425-11	CARBON	4.7K	5%	1/4W		
Q5860	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA				R5877	1-247-883-00	CARBON	150K	5%	1/4W		
Q5861	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5878	1-249-425-11	CARBON	4.7K	5%	1/4W		
Q5862	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5879	1-249-417-11	CARBON	1K	5%	1/4W		
Q5863	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5882	1-249-377-11	CARBON	0.47	5%	1/4W		
Q5864	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5883	1-249-377-11	CARBON	0.47	5%	1/4W		
Q5865	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R5884	1-249-395-11	CARBON	15	5%	1/4W		
<b>RESISTOR</b>						R5885	1-249-377-11	CARBON	0.47	5%	1/4W		
R5802	1-249-417-11	CARBON	1K	5%	1/4W	R5886	1-249-385-11	CARBON	2.2	5%	1/4W		
R5803	1-249-417-11	CARBON	1K	5%	1/4W	<b>SWITCH</b>							
R5804	1-249-429-11	CARBON	10K	5%	1/4W	S5001	1-572-707-11	SWITCH LEVER					
R5805	1-249-430-11	CARBON	12K	5%	1/4W	<div><div>D</div><div><div>*<b>A-1348-122-A</b></div><div><b>D COMPLETE PC BOARD</b></div><div>the high-voltage leads associated with the FBT on the D Board are not included and must be ordered separately. Order the following leads when requesting this D Board:</div><div><div><div><div><div></div></div><div>1-251-715-32</div><div>HV CAP ASSY LEAD</div></div><div><div><div></div></div><div>1-900-805-19</div><div>FOCUS LEAD</div></div></div><div><div>3-710-578-01</div><div>COVER, VOLUME, 6 MOLD</div></div><div><div>4-382-854-01</div><div>SCREW (M3X8), P, SW (+)</div></div><div><div>4-382-854-21</div><div>SCREW (M3X14), P, SW (+)</div></div></div><div><b>CAPACITOR</b></div><div><div>C5001</div><div>1-164-161-11</div><div>CERAMIC CHIP</div><div>0.0022μF</div><div>10%</div><div>50V</div></div><div><div>C5002</div><div>1-106-383-00</div><div>MYLAR</div><div>0.047μF</div><div>10%</div><div>200V</div></div><div><div>C5004</div><div>1-106-383-00</div><div>MYLAR</div><div>0.047μF</div><div>10%</div><div>200V</div></div><div><div>C5005</div><div>1-126-235-11</div><div>ELECT</div><div>100μF</div><div>20%</div><div>6.3V</div></div><div><div>C5006</div><div>1-126-964-11</div><div>ELECT</div><div>10μF</div><div>20%</div><div>50V</div></div><div><div>C5007</div><div>1-126-941-11</div><div>ELECT</div><div>470μF</div><div>20%</div><div>25V</div></div><div><div>C5008</div><div>1-126-940-11</div><div>ELECT</div><div>330μF</div><div>20%</div><div>25V</div></div><div><div>C5009</div><div>1-126-941-11</div><div>ELECT</div><div>470μF</div><div>20%</div><div>25V</div></div><div><div>C5011</div><div>1-107-641-11</div><div>ELECT</div><div>220μF</div><div>20%</div><div>160V</div></div><div><div>C5012</div><div>1-163-017-00</div><div>CERAMIC CHIP</div><div>0.0047μF</div><div>10%</div><div>50V</div></div><div><div>C5013</div><div>1-164-161-11</div><div>CERAMIC CHIP</div><div>0.0022μF</div><div>10%</div><div>50V</div></div></div></div>							
R5807	1-215-413-00	METAL	470	1%	1/4W								
R5808	1-247-883-00	CARBON	150K	5%	1/4W								
R5809	1-249-437-11	CARBON	47K	5%	1/4W								
R5810	1-249-425-11	CARBON	4.7K	5%	1/4W								
R5811	1-249-437-11	CARBON	47K	5%	1/4W								
R5812	1-249-437-11	CARBON	47K	5%	1/4W								
R5813	1-249-437-11	CARBON	47K	5%	1/4W								
R5814	1-249-411-11	CARBON	330	5%	1/4W								
R5815	1-249-437-11	CARBON	47K	5%	1/4W								
R5816	1-249-437-11	CARBON	47K	5%	1/4W								
R5817	1-249-437-11	CARBON	47K	5%	1/4W								
R5818	1-249-437-11	CARBON	47K	5%	1/4W								
R5819	1-249-437-11	CARBON	47K	5%	1/4W								
R5823	1-249-395-11	CARBON	15	5%	1/4W								
R5825	1-249-417-11	CARBON	1K	5%	1/4W								
R5828	1-249-377-11	CARBON	0.47	5%	1/4W								
R5839	1-249-429-11	CARBON	10K	5%	1/4W								
R5845	1-249-425-11	CARBON	4.7K	5%	1/4W								
R5846	1-249-417-11	CARBON	1K	5%	1/4W								
R5847	1-247-807-31	CARBON	100	5%	1/4W								
R5848	1-249-417-11	CARBON	1K	5%	1/4W								
R5849	1-249-377-11	CARBON	0.47	5%	1/4W								
R5852	1-249-441-11	CARBON	100K	5%	1/4W								
R5854	1-249-429-11	CARBON	10K	5%	1/4W								
R5860	1-247-807-31	CARBON	100	5%	1/4W								
R5861	1-249-417-11	CARBON	1K	5%	1/4W								



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C5015	1-107-884-11	ELECT	1000μF	20%	16V	C5072	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C5016	1-136-171-00	FILM	0.33μF	5%	50V	C5073	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C5017	1-115-185-11	CERAMIC CHIP	0.033μF	10%	50V						
C5018	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C5075	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
						C5076	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C5019	1-126-968-11	ELECT	100μF	20%	50V	C5077	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C5020	1-126-767-11	ELECT	1000μF	20%	16V	C5079	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C5021	1-163-133-00	CERAMIC CHIP	470pF	5%	50V	C5080	1-137-372-11	MYLAR	0.022μF	5%	50V
C5022	1-137-368-11	MYLAR	0.0047μF	5%	50V	C5081	1-137-372-11	MYLAR	0.022μF	5%	50V
C5023	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C5102	1-107-888-11	ELECT	47μF	20%	25V
C5024	1-102-038-00	CERAMIC	0.001μF	500V							
						C5501	1-107-888-11	ELECT	47μF	20%	25V
C5025	1-130-471-00	MYLAR	0.001μF	5%	50V	C5502	1-126-941-11	ELECT	470μF	20%	25V
C5026	1-107-655-11	ELECT	47μF	20%	250V	C5503	1-104-665-11	ELECT	100μF	20%	25V
C5027	1-126-963-11	ELECT	4.7μF	20%	50V	C5504	1-126-947-11	ELECT	47μF	20%	16V
C5028	1-126-963-11	ELECT	4.7μF	20%	50V	C5505	1-126-964-11	ELECT	10μF	20%	50V
C5030	1-136-153-00	FILM	0.01μF	5%	50V						
						C5506	1-126-963-11	ELECT	4.7μF	20%	50V
C5031	1-163-011-11	CERAMIC CHIP	0.0015μF	10%	50V	C5507	1-163-141-00	CERAMIC CHIP	0.001μF	5%	50V
C5032	1-104-760-11	CERAMIC CHIP	0.047μF	10%	50V	C5508	1-163-031-91	CERAMIC CHIP	0.01μF		50V
C5033	1-136-165-00	FILM	0.1μF	5%	50V	C5509	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C5034	1-162-114-00	CERAMIC	0.0047μF	2KV		C5511	1-126-933-11	ELECT	100μF	20%	16V
C5035	1-126-933-11	ELECT	100μF	20%	16V						
						C5514	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
C5036	1-126-941-11	ELECT	470μF	20%	25V	C5518	1-129-709-61	FILM	0.0039μF	5%	630V
C5037	1-107-670-11	ELECT	10μF	20%	400V	C5519	1-104-760-11	CERAMIC CHIP	0.047μF	10%	50V
C5038	1-126-947-11	ELECT	47μF	20%	16V	C5522	1-163-275-11	CERAMIC CHIP	0.001μF	5%	50V
C5040	1-126-935-11	ELECT	470μF	20%	16V	C5531	1-136-165-00	FILM	0.1μF	5%	50V
C5041	1-126-935-11	ELECT	470μF	20%	16V						
						C5533	1-137-366-11	MYLAR	0.0022μF	5%	50V
C5043	1-126-767-11	ELECT	1000μF	20%	16V	C5542	1-164-182-11	CERAMIC CHIP	0.0033μF	10%	50V
C5044	1-165-319-11	CERAMIC CHIP	0.1μF		50V	C5548	1-137-194-81	FILM	0.47μF	5%	50V
C5045	1-165-319-11	CERAMIC CHIP	0.1μF		50V	C5550	1-129-716-00	FILM	0.015μF	5%	200V
C5046	1-163-025-11	CERAMIC CHIP	0.001μF		50V	C5576	1-104-666-11	ELECT	220μF	20%	25V
C5047	1-163-025-11	CERAMIC CHIP	0.001μF		50V						
						C5577	1-104-666-11	ELECT	220μF	20%	25V
C5049	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	C5587	1-104-760-11	CERAMIC CHIP	0.047μF	10%	50V
C5050	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C5588	1-136-153-00	FILM	0.01μF	5%	50V
C5051	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V	C5590	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C5052	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V	C5592	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C5053	1-107-372-11	MYLAR	0.22μF	10%	200V						
						C5594	1-136-165-00	FILM	0.1μF	5%	50V
C5056	1-162-318-11	CERAMIC	0.001μF	10%	500V	C5596	1-126-960-11	ELECT	1μF	20%	50V
C5057	1-162-134-11	CERAMIC	470pF	10%	2KV	C5598	1-126-947-11	ELECT	47μF	20%	16V
C5058	1-162-116-00	CERAMIC	680pF	10%	2KV	C5600	1-126-947-11	ELECT	47μF	20%	16V
C5059	1-162-116-00	CERAMIC	680pF	10%	2KV	C5601	1-136-165-00	FILM	0.1μF	5%	50V
C5060	1-137-417-11	MYLAR	0.0047μF	10%	200V						
						C5602	1-126-947-11	ELECT	47μF	20%	16V
C5061	1-117-839-11	FILM	9100pF	3%	1.5KV	C5603	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C5063	1-117-839-11	FILM	9100pF	3%	1.5KV	C5605	1-136-177-00	FILM	1μF	5%	50V
C5064	1-115-520-11	FILM	0.68μF	5%	250V	C5607	1-115-185-11	CERAMIC CHIP	0.033μF	10%	50V
C5065	1-107-506-11	FILM	0.68μF	3%	400V	C5609	1-104-665-11	ELECT	100μF	20%	25V
C5066	1-109-921-11	CERAMIC	0.0015μF	10%	500V						
C5069	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V	C5610	1-126-935-11	ELECT	470μF	20%	16V
C5070	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V	C5611	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C5071	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V	C5612	1-126-964-11	ELECT	10μF	20%	50V
						C5613	1-115-185-11	CERAMIC CHIP	0.033μF	10%	50V



NOTE: The components identified by shading and  $\triangle$  mark are critical for safety. Replace only with part number specified.


NOTE: Les composants identifiés par un trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C5614	1-126-964-11	ELECT	10 $\mu$ F	20%	50V	C8013	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C5616	1-136-165-00	FILM	0.1 $\mu$ F	5%	50V	C8014	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C5617	1-126-947-11	ELECT	47 $\mu$ F	20%	16V	C8015	1-126-966-11	ELECT	33 $\mu$ F	20%	50V
C5618	1-136-171-00	FILM	0.33 $\mu$ F	5%	50V	C8016	1-130-495-00	MYLAR	0.1 $\mu$ F	5%	50V
C5619	1-163-127-00	CERAMIC CHIP	270pF	5%	50V	C8017	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C5621	1-136-165-00	FILM	0.1 $\mu$ F	5%	50V	C8018	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C5623	1-126-933-11	ELECT	100 $\mu$ F	20%	16V	C8019	1-104-665-11	ELECT	100 $\mu$ F	20%	10V
C5625	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	C8020	1-136-103-00	FILM	0.1 $\mu$ F	5%	200V
C5628	1-126-933-11	ELECT	100 $\mu$ F	20%	16V	C8021	1-137-150-11	MYLAR	0.01 $\mu$ F	5%	50V
C6503	1-131-940-11	ELECT	1200 $\mu$ F	20%	250V	C8022	1-126-933-11	ELECT	100 $\mu$ F	20%	16V
C6504	1-163-021-91	CERAMIC CHIP	0.01 $\mu$ F	10%	50V	C8023	1-113-611-11	ELECT(BLOCK)	820 $\mu$ F	20%	250V
C6507	1-126-967-11	ELECT	47 $\mu$ F	20%	50V	C8024	1-126-967-11	ELECT	47 $\mu$ F	20%	50V
C6508	1-126-947-11	ELECT	47 $\mu$ F	20%	25V	C8025	1-126-947-11	ELECT	47 $\mu$ F	20%	25V
C6510	1-130-495-00	MYLAR	0.1 $\mu$ F	5%	50V	C8027	1-130-495-00	MYLAR	0.1 $\mu$ F	5%	50V
C6511	1-163-021-91	CERAMIC CHIP	0.01 $\mu$ F	10%	50V	C8028	1-164-161-11	CERAMIC CHIP	0.0022 $\mu$ F	10%	50V
C6516	1-163-009-91	CERAMIC CHIP	0.001 $\mu$ F	10%	50V	C8030	1-163-809-11	CERAMIC CHIP	0.047 $\mu$ F	10%	25V
C6517	1-126-963-11	ELECT	4.7 $\mu$ F	20%	50V	C8031	1-128-551-11	ELECT	22 $\mu$ F	20%	25V
C6518	1-136-479-11	FILM	0.001 $\mu$ F	2%	50V	C8032	1-136-813-11	FILM	680pF	2%	50V
C6519	1-126-964-11	ELECT	10 $\mu$ F	20%	50V	C8033	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C6525	1-164-143-11	CERAMIC	0.001 $\mu$ F	10%	1KV	C8035	1-125-969-91	CERAMIC	680pF	10%	1KV
C6526	1-164-143-11	CERAMIC	0.001 $\mu$ F	10%	1KV	C8036	1-125-969-91	CERAMIC	680pF	10%	1KV
C6532	1-135-998-21	FILM	56000pF	3%	800V	C8037	1-135-946-21	FILM	47000pF	3%	800V
C6544	1-107-855-12	ELECT(BLOCK)	330 $\mu$ F	160V		C8039	1-163-021-91	CERAMIC CHIP	0.01 $\mu$ F	10%	50V
C6545	1-126-943-11	ELECT	2200 $\mu$ F	20%	25V	C8040	1-126-969-11	ELECT	220 $\mu$ F	20%	50V
C6546	1-128-548-11	ELECT	4700 $\mu$ F	20%	25V	C8041	1-137-194-81	FILM	0.47 $\mu$ F	5%	50V
C6547	1-113-610-11	ELECT(BLOCK)	220 $\mu$ F	20%	250V	C8042	1-136-103-00	FILM	0.1 $\mu$ F	5%	200V
C6548	1-128-549-11	ELECT	3300 $\mu$ F	20%	35V	C8045	1-130-471-00	MYLAR	0.001 $\mu$ F	5%	50V
C6551	1-163-037-11	CERAMIC CHIP	0.022 $\mu$ F	10%	50V	C8046	1-162-131-11	CERAMIC	220pF	10%	2KV
C6561	1-126-960-11	ELECT	1 $\mu$ F	20%	50V	C8047	1-107-444-11	CERAMIC	100pF	10%	2KV
$\triangle$ C6584	1-136-344-11	MYLAR	0.047 $\mu$ F	20%	125V	C8048	1-130-495-00	MYLAR	0.1 $\mu$ F	5%	50V
$\triangle$ C6585	1-119-899-51	CERAMIC	1000pF	10%	250V	C8050	1-129-718-61	FILM	0.022 $\mu$ F	5%	630V
C6586	1-113-924-11	CERAMIC	0.0047 $\mu$ F	20%	125V	C8051	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C6587	1-113-924-11	CERAMIC	0.0047 $\mu$ F	20%	125V	C8053	1-162-117-00	CERAMIC	100pF	10%	500V
C6588	1-113-924-11	CERAMIC	0.0047 $\mu$ F	20%	125V	C8054	1-102-244-00	CERAMIC	220pF	10%	500V
C6589	1-113-924-11	CERAMIC	0.0047 $\mu$ F	20%	125V	C8055	1-136-535-61	FILM	0.0018 $\mu$ F	5%	630V
C6590	1-131-940-11	ELECT	1200 $\mu$ F	20%	250V	C8056	1-163-021-91	CERAMIC CHIP	0.01 $\mu$ F	10%	50V
$\triangle$ C6591	1-119-899-51	CERAMIC	1000pF	10%	250V	C8058	1-137-194-81	FILM	0.47 $\mu$ F	5%	50V
C6594	1-164-004-11	CERAMIC CHIP	0.1 $\mu$ F	10%	25V	C8059	1-126-947-11	ELECT	47 $\mu$ F	20%	10V
C6595	1-104-665-11	ELECT	100 $\mu$ F	20%	25V	C8060	1-107-635-11	ELECT	4.7 $\mu$ F	20%	160V
C6596	1-126-960-11	ELECT	1 $\mu$ F	20%	50V	C8063	1-135-945-21	FILM	10000pF	3%	800V
C8002	1-136-169-00	FILM	0.22 $\mu$ F	5%	50V	<b>CONNECTOR</b>					
C8004	1-104-665-11	ELECT	100 $\mu$ F	20%	10V	* CN5002	1-580-798-11	CONNECTOR PIN (DY) 6P			
C8005	1-126-947-11	ELECT	47 $\mu$ F	20%	25V	* CN5003	1-766-242-11	PIN,CONNECTOR (PC BOARD) 4P			
C8006	1-126-960-11	ELECT	1 $\mu$ F	20%	50V	* CN5501	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
C8007	1-137-150-11	MYLAR	0.01 $\mu$ F	5%	50V	* CN5503	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P			
C8009	1-126-964-11	ELECT	10 $\mu$ F	20%	50V	* CN5505	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P			
C8011	1-126-961-11	ELECT	2.2 $\mu$ F	20%	50V	* CN5506	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P			
C8012	1-126-966-11	ELECT	33 $\mu$ F	20%	50V	* CN5509	1-564-515-11	PLUG,CONNECTOR 12P			







REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
* CN5510	1-564-506-11	PLUG,CONNECTOR 3P		D5523	8-719-923-78	DIODE MTZJ-T-77-12	
* CN6501	1-766-176-11	PIN,CONNECTOR (PC BOARD) 6P		D6501	8-719-404-50	DIODE MA111-TX	
* CN6502	1-766-240-11	PIN,CONNECTOR (PC BOARD) 2P		D6502	8-719-979-64	DIODE $\mu$ F4005PKG23	
				D6507	1-216-295-91	SHORT	
* CN6503	1-564-511-11	PLUG,CONNECTOR 8P		D6508	8-719-982-27	DIODE MTZJ-T-77-33C	
* CN6504	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P		D6509	8-719-068-00	DIODE ERC04-06SE	
* CN6505	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P		D6510	8-719-068-00	DIODE ERC04-06SE	
* CN6506	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P		D6513	8-719-500-71	DIODE D8LC40F	
				D6514	8-719-060-89	DIODE D4SBS6-F	
<b>DIODE</b>				D6515	8-719-060-90	DIODE S2L60F	
D5001	8-719-109-85	DIODE MTZJ-T-77-5.1B		D6516	8-719-060-89	DIODE D4SBS6-F	
D5002	8-719-908-03	DIODE GP08DPKG23		D6517	8-719-060-90	DIODE S2L60F	
D5003	8-719-920-67	DIODE ERC91-02E		D6522	8-719-404-50	DIODE MA111-TX	
D5004	8-719-158-49	DIODE UDZ-TE-17-12B		D6530	8-719-022-99	DIODE D6SB60L	
D5005	8-719-404-50	DIODE MA111-TX					
D5006	8-719-109-72	DIODE MTZJ-T-77-3.9B		D6531	8-719-404-50	DIODE MA111-TX	
D5007	8-719-109-51	DIODE RD2.0ES-T1B1		D6532	8-719-948-45	DIODE ERA22-08TP3	
D5008	8-719-404-50	DIODE MA111-TX		D6533	8-719-404-50	DIODE MA111-TX	
D5009	8-719-404-50	DIODE MA111-TX		D6537	8-719-404-50	DIODE MA111-TX	
D5010	8-719-404-50	DIODE MA111-TX		D8002	8-719-404-50	DIODE MA111-TX	
D5011	8-719-109-63	DIODE RD3.0ES-T1B2		D8003	8-719-404-50	DIODE MA111-TX	
D5012	8-719-018-82	DIODE RGP02-20EL-6394		D8004	8-719-109-85	DIODE MTZJ-T-77-5.1B	
D5013	8-719-302-43	DIODE RGP10GPKG23		D8005	8-719-404-50	DIODE MA111-TX	
D5014	8-719-510-37	DIODE D5LC20U		D8006	8-719-921-89	DIODE MTZJ-T-77-13C	
D5015	8-719-302-43	DIODE RGP10GPKG23		D8007	8-719-404-50	DIODE MA111-TX	
D5016	8-719-920-67	DIODE ERC91-02E		D8009	8-719-404-50	DIODE MA111-TX	
D5017	8-719-920-67	DIODE ERC91-02E		D8010	8-719-052-90	DIODE D1NL40-TA2	
D5018	8-719-110-41	DIODE MTZJ-T-77-15B		D8013	8-719-063-70	DIODE D1NL20U-TA2	
D5019	8-719-404-50	DIODE MA111-TX		D8014	8-719-302-43	DIODE RGP10GPKG23	
D5021	8-719-404-50	DIODE MA111-TX		D8016	8-719-948-45	DIODE ERA22-08TP3	
D5023	8-719-061-21	DIODE PG124S15		D8017	8-719-948-45	DIODE ERA22-08TP3	
D5024	8-719-510-02	DIODE D1NS4-TR		D8018	8-719-052-90	DIODE D1NL40-TA2	
D5025	8-719-510-02	DIODE D1NS4-TR		D8019	8-719-110-41	DIODE MTZJ-T-77-15B	
D5026	8-719-404-50	DIODE MA111-TX		D8020	8-719-404-50	DIODE MA111-TX	
D5027	8-719-404-50	DIODE MA111-TX		D8021	8-719-404-50	DIODE MA111-TX	
D5028	8-719-404-50	DIODE MA111-TX		D8022	8-719-404-50	DIODE MA111-TX	
D5029	8-719-404-50	DIODE MA111-TX		D8025	8-719-982-26	DIODE MTZJ-T-77-33B	
D5031	8-719-977-28	DIODE UDZSTE-1710B		D8026	8-719-404-50	DIODE MA111-TX	
D5032	8-719-404-50	DIODE MA111-TX		D8027	8-719-404-50	DIODE MA111-TX	
D5501	8-719-404-50	DIODE MA111-TX		D8028	8-719-991-33	DIODE 1SS133T-77	
D5502	8-719-404-50	DIODE MA111-TX		D8050	8-719-923-86	DIODE MTZJ-T-77-15	
D5503	8-719-404-50	DIODE MA111-TX		D8051	8-719-923-86	DIODE MTZJ-T-77-15	
D5505	8-719-800-76	DIODE MA153-TX		<b>FERRITE BEAD</b>			
D5506	8-719-404-50	DIODE MA111-TX		FB5001	1-410-397-21	FERRITE	1.1 $\mu$ H
D5507	8-719-800-76	DIODE MA153-TX		FB5002	1-543-298-11	FERRITE	0 $\mu$ H
D5513	8-719-991-33	DIODE 1SS133T-77		FB6501	1-410-397-21	FERRITE	1.1 $\mu$ H
D5514	8-719-063-70	DIODE D1NL20U-TA2		FB6502	1-410-396-41	FERRITE	0.45 $\mu$ H
D5515	8-719-063-70	DIODE D1NL20U-TA2		FB6504	1-410-397-21	FERRITE	1.1 $\mu$ H
D5522	8-719-923-78	DIODE MTZJ-T-77-12		FB6505	1-412-911-11	FERRITE	0 $\mu$ H
				FB6506	1-412-911-11	FERRITE	0 $\mu$ H

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
FB6508	1-410-396-41	FERRITE	0.45μH	L5005	1-419-181-11	COIL, HORIZONTAL	LINEARITY
FB6509	1-410-396-41	FERRITE	0.45μH	L5504	1-406-989-21	INDUCTOR	10MH
FB8001	1-410-396-41	FERRITE	0.45μH	L5505	1-406-989-21	INDUCTOR	10MH
<b>IC</b>				L5601	1-408-612-31	INDUCTOR	56μH
IC5001	8-759-701-01	IC NJM2904M(Te2)		L6503	1-412-525-31	INDUCTOR	10μH
IC5002	8-759-700-07	IC NJM2903M-TE2		L6504	1-412-525-31	INDUCTOR	10μH
IC5003	8-759-518-68	IC PQ12RF21		L6505	1-406-665-11	INDUCTOR	100μH
IC5004	8-759-192-71	IC STV9379		L8001	1-406-670-11	INDUCTOR	680μH
IC5005	8-759-803-42	IC LA6500-FA		L8002	1-419-658-11	INDUCTOR	107μH
IC5006	8-749-013-76	IC PQ6RD83B		L8005	1-406-674-11	INDUCTOR	3.3MH
IC5007	8-759-981-61	IC NJM2901M-TE2		<b>PHOTO COUPLER</b>			
IC5008	8-759-675-90	IC BA51W12ST-V5		PH6501	8-749-924-35	PHOTO COUPLER	ON3171-R
IC5501	6-700-149-01	IC M24C04-MN6T(A)		 PH6502	8-749-924-35	PHOTO COUPLER	ON3171-R
IC5502	8-759-981-61	IC NJM2901M-TE2		 PH6503	8-749-924-35	PHOTO COUPLER	ON3171-R
IC5504	8-759-803-42	IC LA6500-FA		PH8001	8-749-924-35	PHOTO COUPLER	ON3171-R
IC5506	8-759-803-42	IC LA6500-FA		<b>IC LINK</b>			
IC5510	8-759-803-42	IC LA6500-FA		 PS6501	1-576-390-91	LINK, IC	
IC5511	8-752-074-64	IC CXA2026AS		 PS6502	1-576-390-91	LINK, IC	
IC5512	8-759-929-65	IC NJM79M12FA		<b>TRANSISTOR</b>			
IC5513	8-759-595-52	IC CXA8070AP		Q5001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
IC5514	8-759-803-42	IC LA6500-FA		Q5002	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
IC5515	8-749-016-08	IC STK390-910		Q5003	8-729-015-28	TRANSISTOR IRF19630G	
IC6501	8-759-670-30	IC MCZ3001D		Q5004	8-729-019-57	TRANSISTOR 2SA1208S-TP	
IC6503	8-749-012-13	IC DM-58		Q5005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
IC6505	8-749-921-86	IC SE-140N		Q5006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
IC8001	8-759-981-61	IC NJM2901M-TE2		Q5007	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
IC8002	8-759-670-30	IC MCZ3001D		Q5008	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
IC8003	8-759-198-31	IC UPC1093J-1-T		Q5011	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
IC8004	8-759-701-01	IC NJM2904M(Te2)		Q5012	8-729-119-80	TRANSISTOR 2SC2688-LK	
<b>CHIP CONDUCTOR</b>				Q5013	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
JR5006	1-216-295-91	SHORT		Q5014	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
JR5007	1-216-295-91	SHORT		Q5015	8-729-119-80	TRANSISTOR 2SC2688-LK	
JR5010	1-216-295-91	SHORT		Q5016	8-729-119-80	TRANSISTOR 2SC2688-LK	
JR5501	1-216-295-91	SHORT		Q5017	8-729-119-80	TRANSISTOR 2SC2688-LK	
JR6501	1-216-295-91	SHORT		Q5018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
JR8001	1-216-295-91	SHORT		Q5019	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
JR8002	1-216-295-91	SHORT		Q5020	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
JR8003	1-216-295-91	SHORT		Q5021	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
JR8004	1-216-295-91	SHORT		Q5022	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
JR8005	1-216-295-91	SHORT		Q5023	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
JR8006	1-216-295-91	SHORT		Q5026	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
JR8007	1-216-295-91	SHORT		Q5027	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
JR8053	1-216-295-91	SHORT		Q5028	8-729-322-27	TRANSISTOR 2SK2182	
<b>COIL</b>				Q5030	8-729-052-71	TRANSISTOR 2SC3997S-SONY-RA	
L5001	1-406-665-11	INDUCTOR	100μH	Q5031	8-729-053-24	TRANSISTOR 2SK3262-01MR	
L5002	1-406-663-21	INDUCTOR	47μH	Q5033	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L5003	1-406-892-21	INDUCTOR	4MH	Q5034	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L5004	1-412-525-31	INDUCTOR	10μH				

— 131 —





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5058	1-216-113-00	RES-CHIP	470K	5%	1/10W	R5111	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5059	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5112	1-216-033-00	RES-CHIP	220	5%	1/10W
R5063	1-208-813-11	METAL CHIP	20K	0.50%	1/10W	R5113	1-249-425-11	CARBON	4.7K	5%	1/4W
R5064	1-218-761-11	METAL CHIP	240K	0.50%	1/10W	R5114	1-249-425-11	CARBON	4.7K	5%	1/4W
R5065	1-218-761-11	METAL CHIP	240K	0.50%	1/10W	R5115	1-249-417-11	CARBON	1K	5%	1/4W
R5066	1-208-792-11	METAL CHIP	2.7K	0.50%	1/10W	R5116	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5067	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W	R5117	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R5068	1-216-105-91	RES-CHIP	220K	5%	1/10W	R5120	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5069	1-216-113-00	RES-CHIP	470K	5%	1/10W	R5121	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5070	1-216-113-00	RES-CHIP	470K	5%	1/10W	R5122	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5071	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R5123	1-216-295-91	SHORT			
R5072	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R5124	1-216-295-91	SHORT			
R5073	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5125	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5074	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5126	1-216-025-11	RES-CHIP	100	5%	1/10W
R5075	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5127	1-215-890-11	METAL OXIDE	470	5%	2W
R5076	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5128	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5077	1-208-816-11	METAL CHIP	27K	0.50%	1/10W	R5129	1-216-025-11	RES-CHIP	100	5%	1/10W
R5078	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5130	1-249-401-11	CARBON	47	5%	1/4W
R5079	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R5131	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W
R5080	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5132	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5081	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5133	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5082	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R5134	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5083	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W	R5135	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5084	1-216-073-91	RES-CHIP	10K	5%	1/10W	R5136	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5085	1-216-113-00	RES-CHIP	470K	5%	1/10W	R5137	1-216-481-11	METAL OXIDE	1.2K	5%	3W
R5086	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5138	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5087	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5139	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5088	1-216-049-11	RES-CHIP	1K	5%	1/10W	R5140	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5089	1-216-372-11	METAL OXIDE	1.8	5%	2W	R5141	1-215-915-11	METAL OXIDE	470	5%	3W
R5090	1-216-372-11	METAL OXIDE	1.8	5%	2W	R5142	1-216-386-11	METAL OXIDE	0.56	5%	3W
R5091	1-249-389-11	CARBON	4.7	5%	1/4W	R5143	1-216-385-11	METAL OXIDE	0.47	5%	3W
R5092	1-216-049-11	RES-CHIP	1K	5%	1/10W	R5144	1-216-385-11	METAL OXIDE	0.47	5%	3W
R5093	1-208-807-11	METAL CHIP	11K	0.50%	1/10W	R5145	1-215-880-00	METAL OXIDE	10	5%	2W
R5094	1-215-869-11	METAL OXIDE	1K	5%	1W	R5146	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5095	1-249-443-11	CARBON	0.47	5%	1/4W	R5147	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W
R5096	1-249-443-11	CARBON	0.47	5%	1/4W	R5148	1-215-865-11	METAL OXIDE	220	5%	1W
R5097	1-249-380-11	CARBON	0.82	5%	1/4W	R5149	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5098	1-249-379-11	CARBON	0.68	5%	1/4W	R5150	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5101	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W	R5151	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5102	1-208-782-11	METAL CHIP	1K	0.50%	1/10W	R5152	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5103	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W	R5153	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5104	1-216-073-91	RES-CHIP	10K	5%	1/10W	R5154	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5105	1-216-089-91	RES-CHIP	47K	5%	1/10W	R5155	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5106	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5156	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5107	1-249-401-11	CARBON	47	5%	1/4W	R5157	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5108	1-208-819-11	METAL CHIP	36K	0.50%	1/10W	R5158	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5109	1-208-808-11	METAL CHIP	12K	0.50%	1/10W	R5159	1-216-025-11	RES-CHIP	100	5%	1/10W
R5110	1-249-401-11	CARBON	47	5%	1/4W	R5160	1-216-025-11	RES-CHIP	100	5%	1/10W










REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5161	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R5585	1-208-846-11	METAL CHIP	470K	0.50%	1/10W
R5163	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	R5588	1-216-353-00	METAL OXIDE	2.2	5%	1W
R5164	1-260-288-11	CARBON	0.47	5%	1/2W	R5599	1-216-073-91	RES-CHIP	10K	5%	1/10W
R5501	1-216-033-00	RES-CHIP	220	5%	1/10W	R5615	1-249-395-11	CARBON	15	5%	1/4W
R5502	1-216-295-91	SHORT				R5623	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5503	1-216-017-91	RES-CHIP	47	5%	1/10W						
R5504	1-208-840-11	METAL CHIP	270K	0.50%	1/10W	R5645	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5505	1-208-840-11	METAL CHIP	270K	0.50%	1/10W	R5647	1-208-758-11	METAL CHIP	100	0.50%	1/10W
R5506	1-216-073-91	RES-CHIP	10K	5%	1/10W	R5648	1-216-385-11	METAL OXIDE	0.47	5%	3W
R5507	1-216-017-91	RES-CHIP	47	5%	1/10W	R5649	1-215-886-11	METAL OXIDE	100	5%	2W
R5508	1-216-025-11	RES-CHIP	100	5%	1/10W	R5650	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5509	1-216-025-11	RES-CHIP	100	5%	1/10W						
R5510	1-216-025-11	RES-CHIP	100	5%	1/10W	R5657	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R5511	1-216-295-91	SHORT				R5666	1-216-091-00	RES-CHIP	56K	5%	1/10W
R5512	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5669	1-208-789-11	METAL CHIP	2K	0.50%	1/10W
R5513	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5670	1-208-820-11	METAL CHIP	39K	0.50%	1/10W
						R5672	1-216-109-00	RES-CHIP	330K	5%	1/10W
R5514	1-216-295-91	SHORT									
R5516	1-208-792-11	METAL CHIP	2.7K	0.50%	1/10W	R5678	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
R5518	1-208-822-11	METAL CHIP	47K	0.50%	1/10W	R5679	1-249-395-11	CARBON	15	5%	1/4W
R5519	1-208-822-11	METAL CHIP	47K	0.50%	1/10W	R5680	1-249-383-11	CARBON	1.5	5%	1/4W
R5520	1-208-816-11	METAL CHIP	27K	0.50%	1/10W	R5684	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
						R5685	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R5521	1-216-073-91	RES-CHIP	10K	5%	1/10W						
R5522	1-216-073-91	RES-CHIP	10K	5%	1/10W	R5686	1-208-778-11	METAL CHIP	680	0.50%	1/10W
R5523	1-208-822-11	METAL CHIP	47K	0.50%	1/10W	R5688	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
R5525	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R5689	1-216-017-91	RES-CHIP	47	5%	1/10W
R5526	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R5690	1-216-017-91	RES-CHIP	47	5%	1/10W
						R5692	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R5527	1-216-065-91	RES-CHIP	4.7K	5%	1/10W						
R5528	1-216-081-00	RES-CHIP	22K	5%	1/10W	R5693	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R5529	1-216-073-91	RES-CHIP	10K	5%	1/10W	R5694	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R5530	1-216-025-11	RES-CHIP	100	5%	1/10W	R5696	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
R5531	1-216-001-00	RES-CHIP	10	5%	1/10W	R5697	1-208-764-11	METAL CHIP	180	0.50%	1/10W
						R5698	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W
R5532	1-216-001-00	RES-CHIP	10	5%	1/10W						
R5535	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R5699	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5536	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R5700	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
R5544	1-208-812-11	METAL CHIP	18K	0.50%	1/10W	R5702	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
R5545	1-208-818-11	METAL CHIP	33K	0.50%	1/10W	R5704	1-214-657-11	METAL	1	1%	1/4W
						R5705	1-214-657-11	METAL	1	1%	1/4W
R5547	1-216-081-00	RES-CHIP	22K	5%	1/10W						
R5548	1-216-089-91	RES-CHIP	47K	5%	1/10W	R5707	1-216-017-91	RES-CHIP	47	5%	1/10W
R5554	1-208-812-11	METAL CHIP	18K	0.50%	1/10W	R5708	1-216-429-00	METAL OXIDE	270	5%	1W
R5563	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W	R5709	1-216-017-91	RES-CHIP	47	5%	1/10W
R5564	1-208-830-11	METAL CHIP	100K	0.50%	1/10W	R5710	1-216-429-00	METAL OXIDE	270	5%	1W
						R5711	1-260-288-11	CARBON	0.47	5%	1/2W
R5565	1-208-830-11	METAL CHIP	100K	0.50%	1/10W						
R5573	1-216-081-00	RES-CHIP	22K	5%	1/10W	R5712	1-260-288-11	CARBON	0.47	5%	1/2W
R5576	1-249-395-11	CARBON	15	5%	1/4W	R5713	1-215-867-00	METAL OXIDE	470	5%	1W
R5577	1-208-836-11	METAL CHIP	180K	0.50%	1/10W	R5714	1-216-097-11	RES-CHIP	100K	5%	1/10W
R5578	1-208-812-11	METAL CHIP	18K	0.50%	1/10W	R5715	1-216-097-11	RES-CHIP	100K	5%	1/10W
R5579	1-216-113-00	RES-CHIP	470K	5%	1/10W	R5716	1-216-049-11	RES-CHIP	1K	5%	1/10W
R5581	1-208-806-11	METAL CHIP	10K	0.50%	1/10W						
						R5717	1-216-093-91	RES-CHIP	68K	5%	1/10W
						R6501	1-208-757-11	METAL CHIP	91	0.50%	1/10W


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.















REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R6502	1-260-131-11	CARBON	470K	5%	1/2W	 R6590	1-249-415-11	CARBON	680	5%	1/4W
R6503	1-208-758-11	METAL CHIP	100	0.50%	1/10W	R6591	1-216-341-11	METAL OXIDE	0.22	5%	1W
R6504	1-216-073-91	RES-CHIP	10K	5%	1/10W	R6593	1-249-405-11	CARBON	100	5%	1/4W
R6506	1-249-377-11	CARBON	0.47	5%	1/4W	R6596	1-215-445-00	METAL	10K	1%	1/4W
R6507	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R6597	1-215-469-00	METAL	100K	1%	1/4W
R6508	1-216-073-91	RES-CHIP	10K	5%	1/10W	R6598	1-216-342-21	METAL OXIDE	0.27	5%	1W
R6509	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R6599	1-249-417-11	CARBON	1K	5%	1/4W
R6510	1-215-859-00	METAL OXIDE	22	5%	1W	R6600	1-215-445-00	METAL	10K	1%	1/4W
R6511	1-216-073-91	RES-CHIP	10K	5%	1/10W	R6602	1-216-049-11	RES-CHIP	1K	5%	1/10W
R6512	1-216-073-91	RES-CHIP	10K	5%	1/10W	R6603	1-216-073-91	RES-CHIP	10K	5%	1/10W
R6513	1-215-481-00	METAL	330K	1%	1/4W	R6604	1-216-073-91	RES-CHIP	10K	5%	1/10W
R6514	1-215-481-00	METAL	330K	1%	1/4W	R6605	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6515	1-260-131-11	CARBON	470K	5%	1/2W	R6612	1-216-089-91	RES-CHIP	47K	5%	1/10W
 R6516	1-202-962-11	CEMENTED	3.3	5%	10W	R6614	1-260-298-51	CARBON	3.3	5%	1/2W
R6517	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W	R6646	1-215-481-00	METAL	330K	1%	1/4W
R6518	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R8001	1-216-073-91	RES-CHIP	10K	5%	1/10W
R6519	1-216-295-91	SHORT				R8002	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6521	1-260-328-11	CARBON	1K	5%	1/2W	R8003	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6522	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8004	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6523	1-216-081-00	RES-CHIP	22K	5%	1/10W	R8005	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6524	1-216-295-91	SHORT				R8006	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6525	1-216-041-00	RES-CHIP	470	5%	1/10W	R8007	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6526	1-202-933-61	FUSIBLE	0.1	10%	1/2W	R8008	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6527	1-216-093-91	RES-CHIP	68K	5%	1/10W	R8009	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6528	1-216-025-11	RES-CHIP	100	5%	1/10W	R8010	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6529	1-249-393-11	CARBON	10	5%	1/4W	R8011	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6530	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8013	1-216-295-91	SHORT			
R6531	1-249-393-11	CARBON	10	5%	1/4W	R8016	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R6532	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8017	1-216-295-91	SHORT			
R6533	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8018	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6534	1-216-085-91	RES-CHIP	33K	5%	1/10W	R8019	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6535	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8020	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6536	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8021	1-216-049-11	RES-CHIP	1K	5%	1/10W
R6537	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8022	1-216-073-91	RES-CHIP	10K	5%	1/10W
R6538	1-216-073-91	RES-CHIP	10K	5%	1/10W	R8023	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6539	1-215-900-11	METAL OXIDE	22K	5%	2W	R8024	1-216-073-91	RES-CHIP	10K	5%	1/10W
R6540	1-216-049-11	RES-CHIP	1K	5%	1/10W	R8025	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
R6541	1-216-077-91	RES-CHIP	15K	5%	1/10W	R8026	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6542	1-216-049-11	RES-CHIP	1K	5%	1/10W	R8027	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
R6543	1-208-842-11	METAL CHIP	330K	0.50%	1/10W	R8028	1-208-818-11	METAL CHIP	33K	0.50%	1/10W
R6544	1-216-295-91	SHORT				R8029	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
R6547	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R8030	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R6550	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8031	1-208-830-11	METAL CHIP	100K	0.50%	1/10W
R6552	1-216-081-00	RES-CHIP	22K	5%	1/10W	R8032	1-216-073-91	RES-CHIP	10K	5%	1/10W
R6553	1-216-109-00	RES-CHIP	330K	5%	1/10W	R8033	1-208-781-11	METAL CHIP	910	0.50%	1/10W
R6556	1-217-625-00	METAL	0.05	10%	2W	R8034	1-216-091-00	RES-CHIP	56K	5%	1/10W
R6557	1-216-097-11	RES-CHIP	100K	5%	1/10W	 R8035	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W
R6583	1-216-077-91	RES-CHIP	15K	5%	1/10W	 R8036	1-215-444-00	METAL	9.1K	1%	1/4W

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

A component identified by this  symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8037	1-215-444-00	METAL	9.1K	1% 1/4W	R8101	1-216-101-00	RES-CHIP	150K	5%	1/10W
	R8038	1-215-444-00	METAL	9.1K	1% 1/4W	R8102	1-216-081-00	RES-CHIP	22K	5%	1/10W
	R8039	1-215-444-00	METAL	9.1K	1% 1/4W	R8103	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
	R8040	1-215-444-00	METAL	9.1K	1% 1/4W	R8104	1-216-089-91	RES-CHIP	47K	5%	1/10W
	R8041	1-208-782-11	METAL CHIP	1K	0.50% 1/10W	R8108	1-216-097-11	RES-CHIP	100K	5%	1/10W
						R8109	1-215-922-11	METAL OXIDE	6.8K	5%	3W
	R8042	1-208-806-11	METAL CHIP	10K	0.50% 1/10W	R8111	1-215-922-11	METAL OXIDE	6.8K	5%	3W
	R8043	1-216-349-00	METAL OXIDE	1	5% 1W	R8112	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R8044	1-208-837-11	METAL CHIP	200K	0.50% 1/10W	R8113	1-216-117-00	RES-CHIP	680K	5%	1/10W
	R8047	1-216-097-11	RES-CHIP	100K	5% 1/10W	R8114	1-215-922-11	METAL OXIDE	6.8K	5%	3W
	R8049	1-208-758-11	METAL CHIP	100	0.50% 1/10W	R8115	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R8050	1-211-964-11	METAL CHIP	33	0.50% 1/10W	R8116	1-216-486-21	METAL OXIDE	8.2K	5%	3W
	R8051	1-220-926-11	FUSIBLE	0.47	10% 1/2W	R8117	1-216-097-11	RES-CHIP	100K	5%	1/10W
	R8053	1-208-842-11	METAL CHIP	330K	0.50% 1/10W	R8118	1-216-085-91	RES-CHIP	33K	5%	1/10W
	R8054	1-208-842-11	METAL CHIP	330K	0.50% 1/10W	R8119	1-216-486-21	METAL OXIDE	8.2K	5%	3W
	R8055	1-208-842-11	METAL CHIP	330K	0.50% 1/10W	R8123	1-216-025-11	RES-CHIP	100	5%	1/10W
	R8056	1-208-804-11	METAL CHIP	8.2K	0.50% 1/10W	R8124	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R8057	1-208-809-11	METAL CHIP	13K	0.50% 1/10W	R8125	1-216-001-00	RES-CHIP	10	5%	1/10W
	R8058	1-249-393-11	CARBON	10	5% 1/4W	R8126	1-216-001-00	RES-CHIP	10	5%	1/10W
	R8059	1-216-295-91	SHORT			R8127	1-216-295-91	SHORT			
	R8060	1-208-774-11	METAL CHIP	470	0.50% 1/10W	R8137	1-249-417-11	CARBON	1K	5%	1/4W
	R8061	1-249-393-11	CARBON	10	5% 1/4W	R8144	1-216-025-11	RES-CHIP	100	5%	1/10W
	R8062	1-216-073-91	RES-CHIP	10K	5% 1/10W	R8145	1-216-025-11	RES-CHIP	100	5%	1/10W
	R8063	1-216-073-91	RES-CHIP	10K	5% 1/10W	R8146	1-216-049-11	RES-CHIP	1K	5%	1/10W
	R8065	1-216-089-91	RES-CHIP	47K	5% 1/10W	R8147	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8066	1-216-049-11	RES-CHIP	1K	5% 1/10W	R8148	1-208-826-11	METAL CHIP	68K	0.50%	1/10W
	R8068	1-216-295-91	SHORT			R8149	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
	R8069	1-249-419-11	CARBON	1.5K	5% 1/4W	R8150	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R8070	1-217-611-00	METAL	0.1	10% 2W	R8151	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R8071	1-216-073-91	RES-CHIP	10K	5% 1/10W	R8152	1-216-091-00	RES-CHIP	56K	5%	1/10W
	R8072	1-208-782-11	METAL CHIP	1K	0.50% 1/10W	R8199	1-249-389-11	CARBON	4.7	5%	1/4W
	R8073	1-208-790-11	METAL CHIP	2.2K	0.50% 1/10W	<b>VARIABLE RESISTOR</b>					
	R8074	1-208-793-11	METAL CHIP	3K	0.50% 1/10W		 RV8001	1-225-630-91	RES, VAR, ADJ, CERMET	20K	
	R8077	1-208-838-91	METAL CHIP	220K	0.50% 1/10W		 RV8002	1-225-627-91	RES, VAR, ADJ, CERMET	2K	
	R8078	1-208-838-91	METAL CHIP	220K	0.50% 1/10W	<b>RELAY</b>					
	R8080	1-249-431-11	CARBON	15K	5% 1/4W		RY6501	1-755-395-11	RELAY (AC POWER)		
	R8081	1-249-377-11	CARBON	0.47	5% 1/4W		RY6502	1-755-214-11	RELAY, AC POWER		
	R8082	1-216-133-91	RES-CHIP	3.3M	5% 1/10W	<b>SPARK GAP</b>					
	R8085	1-219-749-91	CARBON	10K	5% 1/2W	SG8002	1-517-499-21	GAP, SPARK			
	R8086	1-219-751-91	CARBON	47K	5% 1/2W	SG8005	1-517-499-21	GAP, SPARK			
	R8087	1-216-295-91	SHORT			<b>TRANSFORMER</b>					
	R8089	1-216-089-91	RES-CHIP	47K	5% 1/10W	T5001	1-435-621-11	TRANSFORMER, HORIZONTAL OUTPUT			
	R8091	1-215-485-00	METAL	470K	1% 1/4W	T5002	1-435-636-11	TRANSFORMER, HORIZONTAL DRIVE			
	R8093	1-216-101-00	RES-CHIP	150K	5% 1/10W		T6501	1-435-576-12	TRANSFORMER, CONVERTER (PIT)		
	R8095	1-215-485-00	METAL	470K	1% 1/4W		T8001	1-453-350-21	FBT ASSY NX-6000/J1C4		
	R8096	1-216-295-91	SHORT			T8002	1-433-934-11	TRANSFORMER, FERRITE (DFT)			
	R8098	1-249-441-11	CARBON	100K	5% 1/4W						
	R8099	1-249-441-11	CARBON	100K	5% 1/4W						
	R8100	1-249-441-11	CARBON	100K	5% 1/4W						



REF. NO.	PART NO.	DESCRIPTION	VALUES				REF. NO.	PART NO.	DESCRIPTION	VALUES			
<b><u>THERMISTOR</u></b>							C2414	1-126-791-11	ELECT	10μF	20%	16V	
TH5001	1-800-193-00	THERMISTOR					C2415	1-126-964-11	ELECT	10μF	20%	50V	
TH5002	1-807-796-11	THERMISTOR					<b><u>CONNECTOR</u></b>						
<b><u>HB</u></b>							*	CN2401	1-785-303-11	CONNECTOR, DIN (PLUG) 64P			
<b><u>A-1372-904-A HB(COM) MOUNTED PC BOARD</u></b>							<b><u>DIODE</u></b>						
<b><u>CAPACITOR</u></b>							D2401	8-719-977-28	DIODE UDZSTE-1710B				
C4504	1-126-964-11	ELECT	10μF	20%	50V	D2402	8-719-977-28	DIODE UDZSTE-1710B					
C4505	1-126-964-11	ELECT	10μF	20%	50V	D2403	8-719-977-28	DIODE UDZSTE-1710B					
<b><u>CONNECTOR</u></b>							D2405	8-719-977-28	DIODE UDZSTE-1710B				
CN4503	1-764-334-11	PLUG,CONNECTOR 11P					D2406	8-719-977-28	DIODE UDZSTE-1710B				
<b><u>DIODE</u></b>							D2407	8-719-977-28	DIODE UDZSTE-1710B				
D4503	8-719-977-28	DIODE UDZSTE-1710B					D2409	8-719-977-28	DIODE UDZSTE-1710B				
D4505	8-719-977-28	DIODE UDZSTE-1710B					D2410	8-719-800-76	DIODE MA153-TX				
D4506	8-719-977-28	DIODE UDZSTE-1710B					D2411	8-719-977-28	DIODE UDZSTE-1710B				
<b><u>FILTER</u></b>							D2412	8-719-800-76	DIODE MA153-TX				
FL4501	1-239-583-21	FILTER, EMI					D2413	8-719-800-76	DIODE MA153-TX				
FL4502	1-239-583-21	FILTER, EMI					D2414	8-719-800-76	DIODE MA153-TX				
FL4503	1-239-583-21	FILTER, EMI					D2415	8-719-800-76	DIODE MA153-TX				
<b><u>JACK</u></b>							D2416	8-719-800-76	DIODE MA153-TX				
J4501	1-770-053-11	TERMINAL	BLOCK, S(LIGHT ANGLE)				D2423	8-719-800-76	DIODE MA153-TX				
<b><u>RESISTOR</u></b>							D2424	8-719-800-76	DIODE MA153-TX				
R4506	1-216-113-00	RES-CHIP	470K	5%	1/10W	D2425	8-719-800-76	DIODE MA153-TX					
R4507	1-216-113-00	RES-CHIP	470K	5%	1/10W	D2426	8-719-800-76	DIODE MA153-TX					
R4509	1-216-049-11	RES-CHIP	1K	5%	1/10W	D2427	8-719-800-76	DIODE MA153-TX					
R4511	1-216-295-91	SHORT					D2428	8-719-800-76	DIODE MA153-TX				
R4512	1-216-295-91	SHORT					D2429	8-719-977-28	DIODE UDZSTE-1710B				
R4513	1-216-295-91	SHORT					D2430	8-719-977-28	DIODE UDZSTE-1710B				
<b><u>U</u></b>							D2431	8-719-977-28	DIODE UDZSTE-1710B				
<b><u>A-1373-817-A U (COM) MOUNTED PC BOARD</u></b>							D2432	8-719-977-28	DIODE UDZSTE-1710B				
<b><u>CAPACITOR</u></b>							D2433	8-719-977-28	DIODE UDZSTE-1710B				
C2405	1-126-964-11	ELECT	10μF	20%	50V	D2434	8-719-977-28	DIODE UDZSTE-1710B					
C2406	1-126-791-11	ELECT	10μF	20%	16V	<b><u>JACK</u></b>							
C2407	1-126-964-11	ELECT	10μF	20%	50V	J2401	1-573-967-12	BLOCK, (S) TERMINAL					
C2408	1-126-791-11	ELECT	10μF	20%	16V	J2402	1-750-517-11	JACK BLOCK, PIN 3P					
C2409	1-126-964-11	ELECT	10μF	20%	50V	J2403	1-750-517-11	JACK BLOCK, PIN 3P					
C2410	1-126-964-11	ELECT	10μF	20%	50V	J2405	1-764-143-11	JACK					
C2411	1-126-926-11	ELECT	1000μF	20%	10V	J2406	1-764-143-11	JACK					
C2412	1-126-964-11	ELECT	10μF	20%	50V	J2407	1-774-358-11	JACK BLOCK, PIN					
C2413	1-126-964-11	ELECT	10μF	20%	50V	J2408	1-774-358-11	JACK BLOCK, PIN					
<b><u>RESISTOR</u></b>							J2409	1-750-516-11	JACK BLOCK, PIN 2P				
R2401	1-216-113-00	RES-CHIP	470K	5%	1/10W	<b><u>RESISTOR</u></b>							
R2402	1-216-113-00	RES-CHIP	470K	5%	1/10W	R2401	1-216-113-00	RES-CHIP	470K	5%	1/10W		
R2403	1-216-113-00	RES-CHIP	470K	5%	1/10W	R2402	1-216-113-00	RES-CHIP	470K	5%	1/10W		
R2407	1-216-113-00	RES-CHIP	470K	5%	1/10W	R2403	1-216-113-00	RES-CHIP	470K	5%	1/10W		
						R2407	1-216-113-00	RES-CHIP	470K	5%	1/10W		



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2408	1-216-113-00	RES-CHIP	470K	5%	1/10W	<b>SWITCH</b>					
R2409	1-216-113-00	RES-CHIP	470K	5%	1/10W	S02	1-762-837-11	SWITCH TACTILE			
R2428	1-216-113-00	RES-CHIP	470K	5%	1/10W	S03	1-762-837-11	SWITCH TACTILE			
R2430	1-216-113-00	RES-CHIP	470K	5%	1/10W	S04	1-762-837-11	SWITCH TACTILE			
R2431	1-216-113-00	RES-CHIP	470K	5%	1/10W	S05	1-762-837-11	SWITCH TACTILE			
R2432	1-216-113-00	RES-CHIP	470K	5%	1/10W	S06	1-692-431-21	SWITCH TACTILE			
R2433	1-216-113-00	RES-CHIP	470K	5%	1/10W	S07	1-692-431-21	SWITCH TACTILE			
R2434	1-216-021-00	RES-CHIP	68	5%	1/10W	S08	1-692-431-21	SWITCH TACTILE			
R2435	1-216-295-91	SHORT				S09	1-692-431-21	SWITCH TACTILE			
R2436	1-216-295-91	SHORT				S10	1-692-431-21	SWITCH TACTILE			
						S11	1-692-431-21	SWITCH TACTILE			
						S12	1-692-431-21	SWITCH TACTILE			
<b>HA</b>						<b>S</b>					
*	A-1377-021-A	HA MOUNTED PC BOARD				*	A-1391-048-A	S MOUNTED PC BOARD			
	<b>CAPACITOR</b>						<b>CAPACITOR</b>				
C05	1-126-964-11	ELECT	10μF	20%	50V	C4101	1-126-964-11	ELECT	10μF	20%	50V
	<b>CONNECTOR</b>					C4102	1-126-964-11	ELECT	10μF	20%	50V
* CN01	1-564-515-11	PLUG,CONNECTOR	12P			C4103	1-126-959-11	ELECT	0.47μF	20%	50V
	<b>DIODE</b>					C4104	1-126-959-11	ELECT	0.47μF	20%	50V
D01	8-719-070-80	DIODE LNK0120022G				C4105	1-126-968-11	ELECT	100μF	20%	50V
D02	8-719-070-80	DIODE LNK0120022G				C4106	1-126-968-11	ELECT	100μF	20%	50V
D07	8-719-109-89	DIODE RD5.6ES-T1B2				C4107	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
	<b>IC</b>					C4108	1-126-964-11	ELECT	10μF	20%	50V
IC101	8-742-212-20	HYB IC SBX3081-71				C4109	1-126-964-11	ELECT	10μF	20%	50V
	<b>RESISTOR</b>					C4110	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V
R03	1-249-429-11	CARBON	10K	5%	1/4W	C4111	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
R05	1-247-807-31	CARBON	100	5%	1/4W	C4112	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
R07	1-249-409-11	CARBON	220	5%	1/4W	C4113	1-115-340-11	CERAMIC CHIP	0.22μF	10%	25V
R08	1-249-409-11	CARBON	220	5%	1/4W	C4114	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
R09	1-249-433-11	CARBON	22K	5%	1/4W	C4115	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
						C4116	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
						C4117	1-126-968-11	ELECT	100μF	20%	50V
							<b>CONNECTOR</b>				
R11	1-249-385-11	CARBON	2.2	5%	1/4W	CN4101	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P			
R12	1-215-445-00	METAL	10K	1%	1/4W		<b>DIODE</b>				
R14	1-215-437-00	METAL	4.7K	1%	1/4W	D4101	8-719-914-43	DIODE DAN202K-T-146			
R15	1-215-431-00	METAL	2.7K	1%	1/4W	D4102	8-719-914-44	DIODE DAP202K-T-146			
R16	1-215-427-00	METAL	1.8K	1%	1/4W		<b>IC</b>				
R17	1-215-425-00	METAL	1.5K	1%	1/4W	IC4101	8-759-686-15	IC NJM2180M (TE2)			
R18	1-215-421-00	METAL	1K	1%	1/4W	IC4102	8-759-711-10	IC NJU4066BM-T1			
R19	1-215-419-00	METAL	820	1%	1/4W	IC4103	8-752-058-68	IC CXA1315M-T4			
R20	1-215-415-00	METAL	560	1%	1/4W						
R21	1-215-413-00	METAL	470	1%	1/4W						
R22	1-215-413-00	METAL	470	1%	1/4W						
R23	1-249-385-11	CARBON	2.2	5%	1/4W						



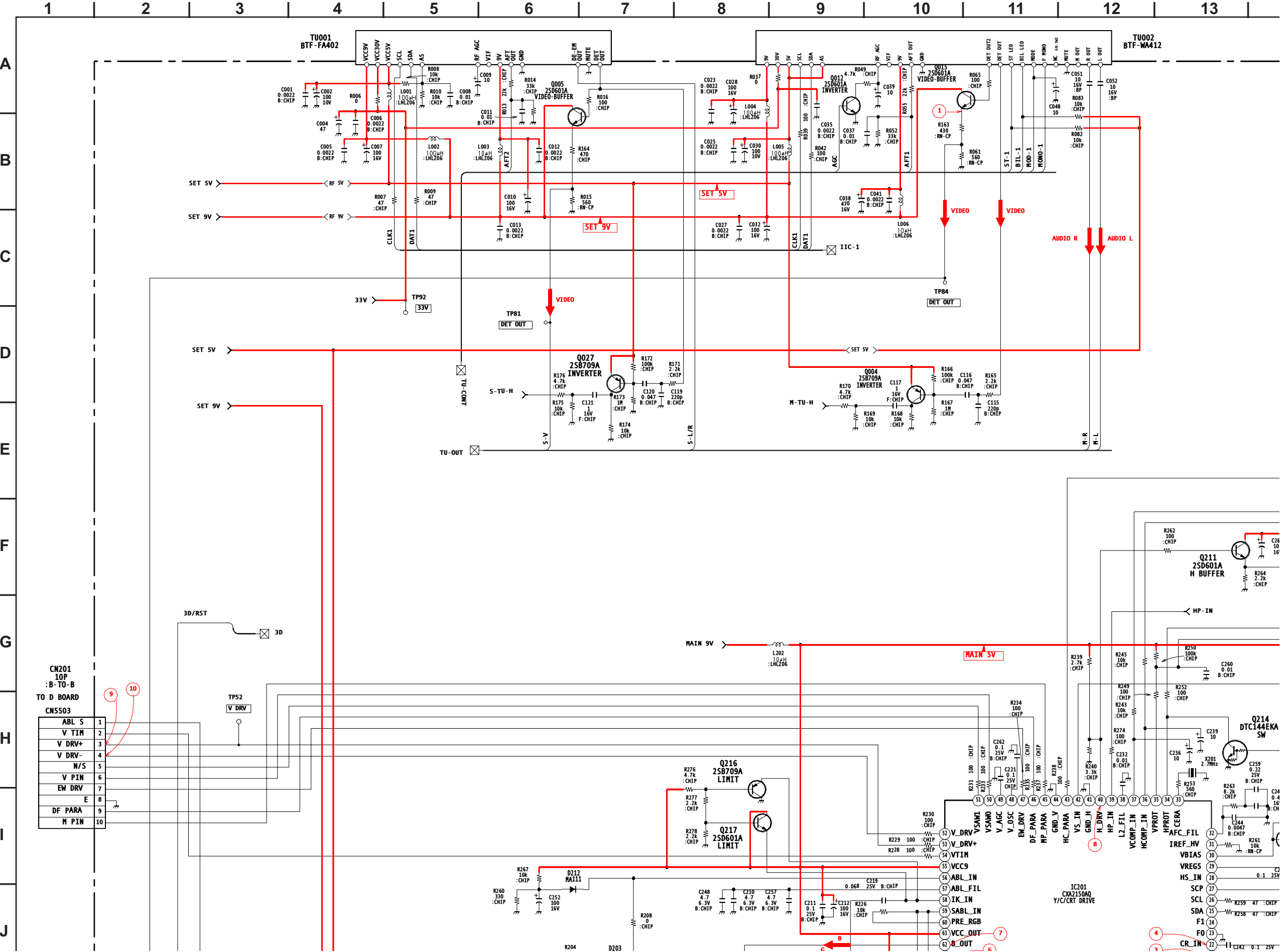


REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES			
<u>COIL</u>						<div>W</div>						
L4101	1-408-607-31	INDUCTOR	22μH									
<u>RESISTOR</u>												
R4101	1-216-071-00	RES-CHIP	8.2K	5%	1/10W	*	A-1372-833-A	W MOUNTED PC BOARD				
R4102	1-216-071-00	RES-CHIP	8.2K	5%	1/10W							
R4103	1-216-059-00	RES-CHIP	2.7K	5%	1/10W		4-382-854-01	SCREW (M3X8), P, SW (+)				
R4104	1-216-059-00	RES-CHIP	2.7K	5%	1/10W			<u>CAPACITOR</u>				
R4105	1-216-073-91	RES-CHIP	10K	5%	1/10W							
R4106	1-216-097-11	RES-CHIP	100K	5%	1/10W	C9101	1-107-364-11	MYLAR	0.01μF	10%	200V	
R4107	1-216-097-11	RES-CHIP	100K	5%	1/10W	C9102	1-107-364-11	MYLAR	0.01μF	10%	200V	
R4108	1-216-069-00	RES-CHIP	6.8K	5%	1/10W	C9103	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	
R4109	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	C9104	1-163-009-91	CERAMIC CHIP	0.001μF	10%	50V	
R4110	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	C9105	1-104-999-11	MYLAR	0.1μF	10%	200V	
R4111	1-216-073-91	RES-CHIP	10K	5%	1/10W	C9106	1-107-667-11	ELECT	2.2μF	20%	160V	
R4112	1-216-049-11	RES-CHIP	1K	5%	1/10W	C9107	1-126-935-11	ELECT	470μF	20%	16V	
R4113	1-216-091-00	RES-CHIP	56K	5%	1/10W	C9108	1-126-935-11	ELECT	470μF	20%	16V	
R4114	1-216-295-91	SHORT				C9109	1-107-963-11	ELECT	33μF	20%	160V	
R4115	1-216-295-91	SHORT				C9112	1-126-933-11	ELECT	100μF	20%	16V	
R4116	1-216-089-91	RES-CHIP	47K	5%	1/10W	C9113	1-126-933-11	ELECT	100μF	20%	16V	
R4117	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	C9115	1-126-935-11	ELECT	470μF	20%	6.3V	
R4118	1-216-055-00	RES-CHIP	1.8K	5%	1/10W	C9116	1-126-935-11	ELECT	470μF	20%	6.3V	
R4119	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	C9117	1-104-999-11	MYLAR	0.1μF	10%	200V	
R4120	1-216-073-91	RES-CHIP	10K	5%	1/10W			<u>CONNECTOR</u>				
R4121	1-216-077-91	RES-CHIP	15K	5%	1/10W	*	CN9101	1-564-506-11	PLUG,CONNECTOR 3P			
R4123	1-216-073-91	RES-CHIP	10K	5%	1/10W	*	CN9102	1-564-515-11	PLUG,CONNECTOR 12P			
R4124	1-216-049-11	RES-CHIP	1K	5%	1/10W	*	CN9103	1-564-506-11	PLUG,CONNECTOR 3P			
R4125	1-216-101-00	RES-CHIP	150K	5%	1/10W	*	CN9104	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P			
R4126	1-216-081-00	RES-CHIP	22K	5%	1/10W			<u>DIODE</u>				
R4127	1-216-073-91	RES-CHIP	10K	5%	1/10W	D9101	8-719-924-11	DIODE MTZJ-T-77-22				
R4128	1-216-091-00	RES-CHIP	56K	5%	1/10W	D9102	8-719-924-11	DIODE MTZJ-T-77-22				
R4129	1-216-073-91	RES-CHIP	10K	5%	1/10W	D9103	8-719-404-50	DIODE MA111-TX				
R4130	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	D9104	8-719-404-50	DIODE MA111-TX				
R4131	1-216-129-00	RES-CHIP	2.2M	5%	1/10W	D9105	8-719-404-50	DIODE MA111-TX				
						D9106	8-719-404-50	DIODE MA111-TX				
						D9107	8-719-510-02	DIODE D1NS4-TR				
R4132	1-216-085-91	RES-CHIP	33K	5%	1/10W			<u>COIL</u>				
R4133	1-216-092-00	RES-CHIP	62K	5%	1/10W							
R4134	1-216-073-91	RES-CHIP	10K	5%	1/10W							
R4135	1-216-017-91	RES-CHIP	47	5%	1/10W	L9101	1-412-525-31	INDUCTOR	10μH			
R4136	1-216-017-91	RES-CHIP	47	5%	1/10W			<u>TRANSISTOR</u>				
						Q9101	8-729-045-05	TRANSISTOR 2SA2005				
						Q9102	8-729-045-04	TRANSISTOR 2SC5511				
						Q9103	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				
						Q9104	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				
						Q9105	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR				
						Q9106	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				
						Q9107	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR				
						Q9108	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES
RESISTOR						ACCESSORIES AND PACKAGING			
R9102	1-249-414-11	CARBON	560	5%	1/4W	*	4-041-426-01	BAG, PROTECTION	
R9103	1-249-432-11	CARBON	18K	5%	1/4W		4-042-463-01	SHEET, PROTECTION	
R9104	1-249-432-11	CARBON	18K	5%	1/4W		4-085-012-21	MANUAL, INSTRUCTION	
R9105	1-249-414-11	CARBON	560	5%	1/4W			(KV-40XBR700)	
R9106	1-249-421-11	CARBON	2.2K	5%	1/4W		4-085-012-31	MANUAL, INSTRUCTION	
R9107	1-249-421-11	CARBON	2.2K	5%	1/4W			(KV-40XBR700-CND)	
R9108	1-260-316-51	CARBON	100	5%	1/2W	*	4-082-895-01	CUSHION, LOWER	
R9109	1-249-385-11	CARBON	2.2	5%	1/4W	*	4-082-894-01	CUSHION, UPPER	
R9110	1-249-385-11	CARBON	2.2	5%	1/4W	*	4-396-077-01	JOINT	
R9111	1-249-405-11	CARBON	100	5%	1/4W	REMOTE COMMANDER			
R9112	1-215-915-11	METAL OXIDE	470	5%	3W	1-476-683-11	REMOTE COMMANDER (RM-Y184)		
R9113	1-216-017-91	RES-CHIP	47	5%	1/10W	4-081-888-11	BATTERY COVER FOR (RM-Y184)		
R9114	1-249-425-11	CARBON	4.7K	5%	1/4W				
R9115	1-216-065-91	RES-CHIP	4.7K	5%	1/10W				
R9117	1-216-047-91	RES-CHIP	820	5%	1/10W				
R9118	1-249-405-11	CARBON	100	5%	1/4W				
R9119	1-249-399-11	CARBON	33	5%	1/4W				
R9120	1-247-807-31	CARBON	100	5%	1/4W				
R9121	1-249-409-11	CARBON	220	5%	1/4W				
R9122	1-216-053-00	RES-CHIP	1.5K	5%	1/10W				
R9123	1-249-401-11	CARBON	47	5%	1/4W				
R9124	1-249-401-11	CARBON	47	5%	1/4W				
R9125	1-216-073-91	RES-CHIP	10K	5%	1/10W				
R9126	1-249-395-11	CARBON	15	5%	1/4W				
R9127	1-216-005-00	RES-CHIP	15	5%	1/10W				
R9128	1-216-295-91	SHORT							

A BOARD SCHEMATIC DIAGRAM (1 OF 3)

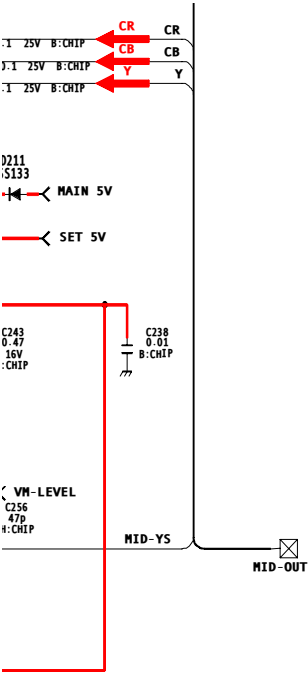




	B	C	E		B	C	E		B	C	E
Q001	0.4	0.0	GND	Q702	0.1	5.0	0.0	Q731	0.0	0.0	5.0
Q002	0.4	0.0	GND	Q703	4.6	5.0	GND	Q6001	0.0	23.9	GND
Q004	4.6	1.1	5.0	Q704	0.0	4.4	GND	Q6002	26.3	24.0	26.3
Q005	4.3	9.0	3.6	Q705	5.0	0.0	0.0	Q6009	10.3	0.0	10.4
QO12	0.1	7.5	GND	Q706	5.0	0.0	0.0	Q6010	0.0	2.4	GND
Q015	6.2	9.0	5.5	Q707	0.5	0.0	GND	Q7001	0.3	8.8	0.0
Q027	4.5	0.9	5.0	Q709	10.4	0.7	10.2	Q7004	0.3	8.0	GND
Q203	2.3	GND	3.2	Q710	25.8	0.0	26.4	Q7005	0.0	0.0	GND
Q204	2.5	GND	3.2	Q712	0.0	5.0	0.0	Q7009	0.3	8.0	GND
Q207	2.3	GND	3.2	Q717	0.0	5.0	GND	Q7010	0.0	0.0	GND
Q208	2.3	GND	3.2	Q721	0.0	0.0	GND	Q7013	0.0	0.0	GND
Q209	0.0	2.2	GND	Q723	0.2	4.6	GND	Q7014	0.0	4.1	GND
Q211	2.8	11.5	2.3	Q724	0.5	4.6	GND	Q7015	0.0	0.0	GND
Q212	5.6	9.0	5.0	Q726	4.6	0.1	4.6	Q7016	0.0	4.2	GND







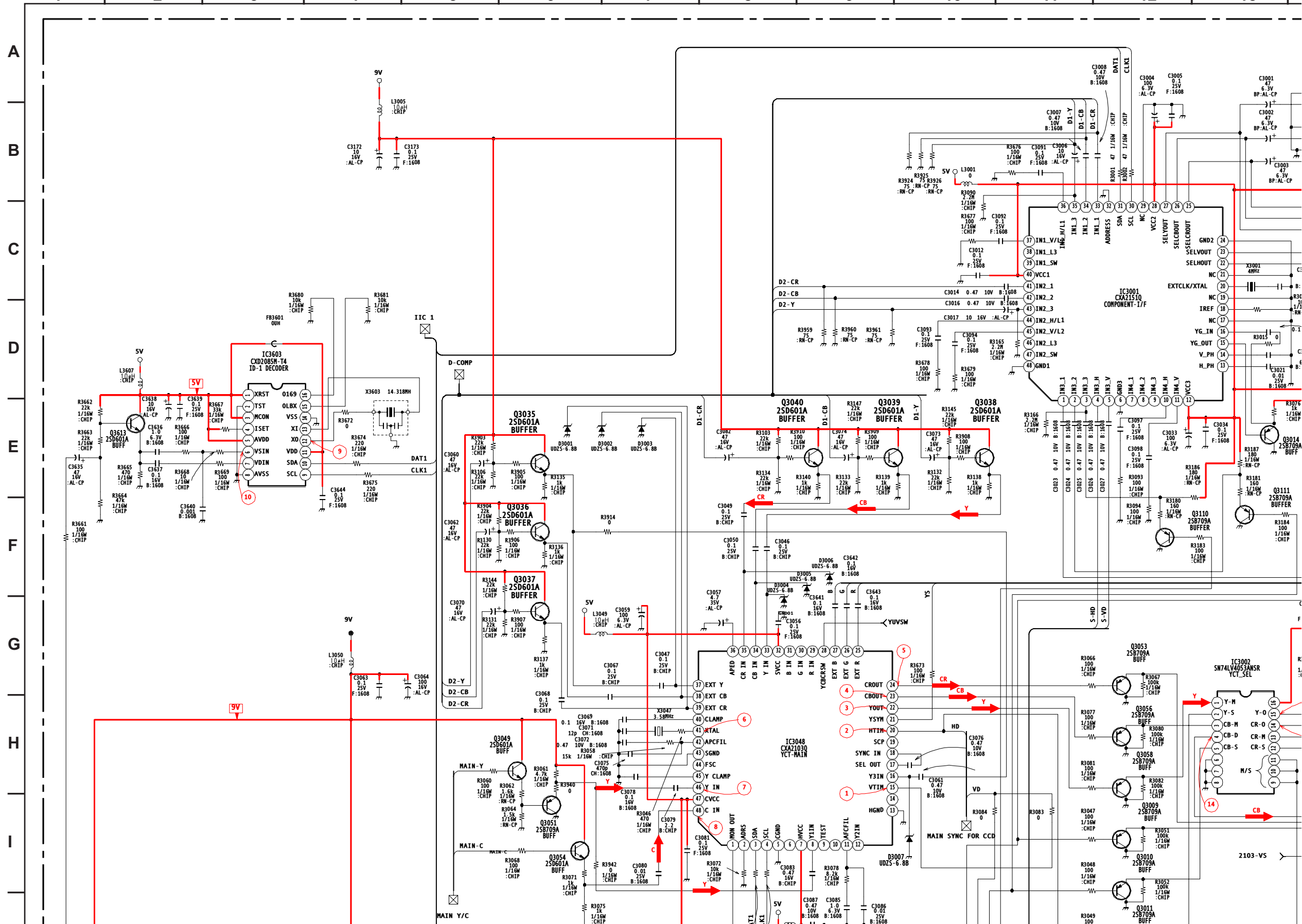
# A (1/3)

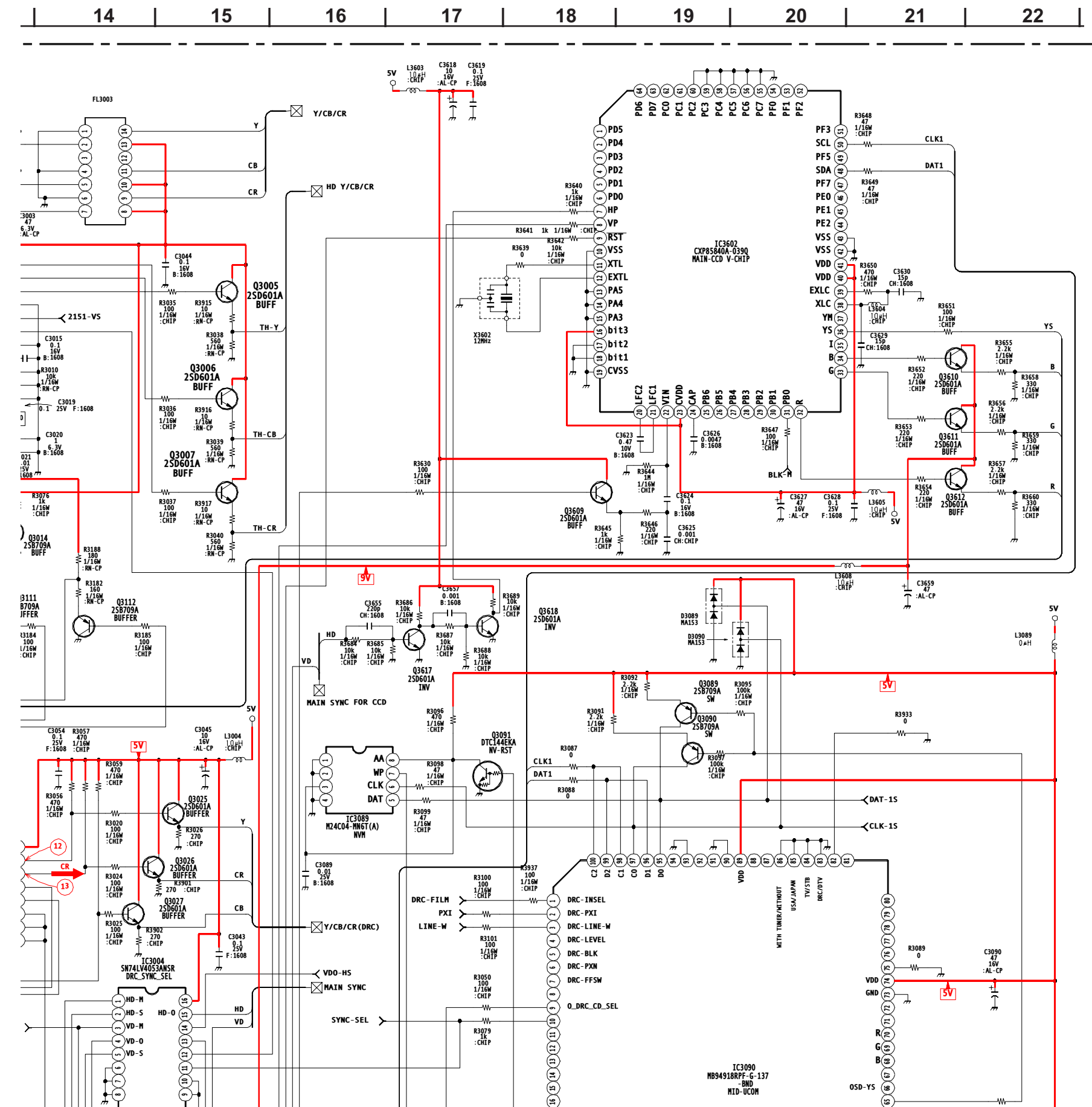
TUNER  
CRT DRIVE

DX1A-919-A

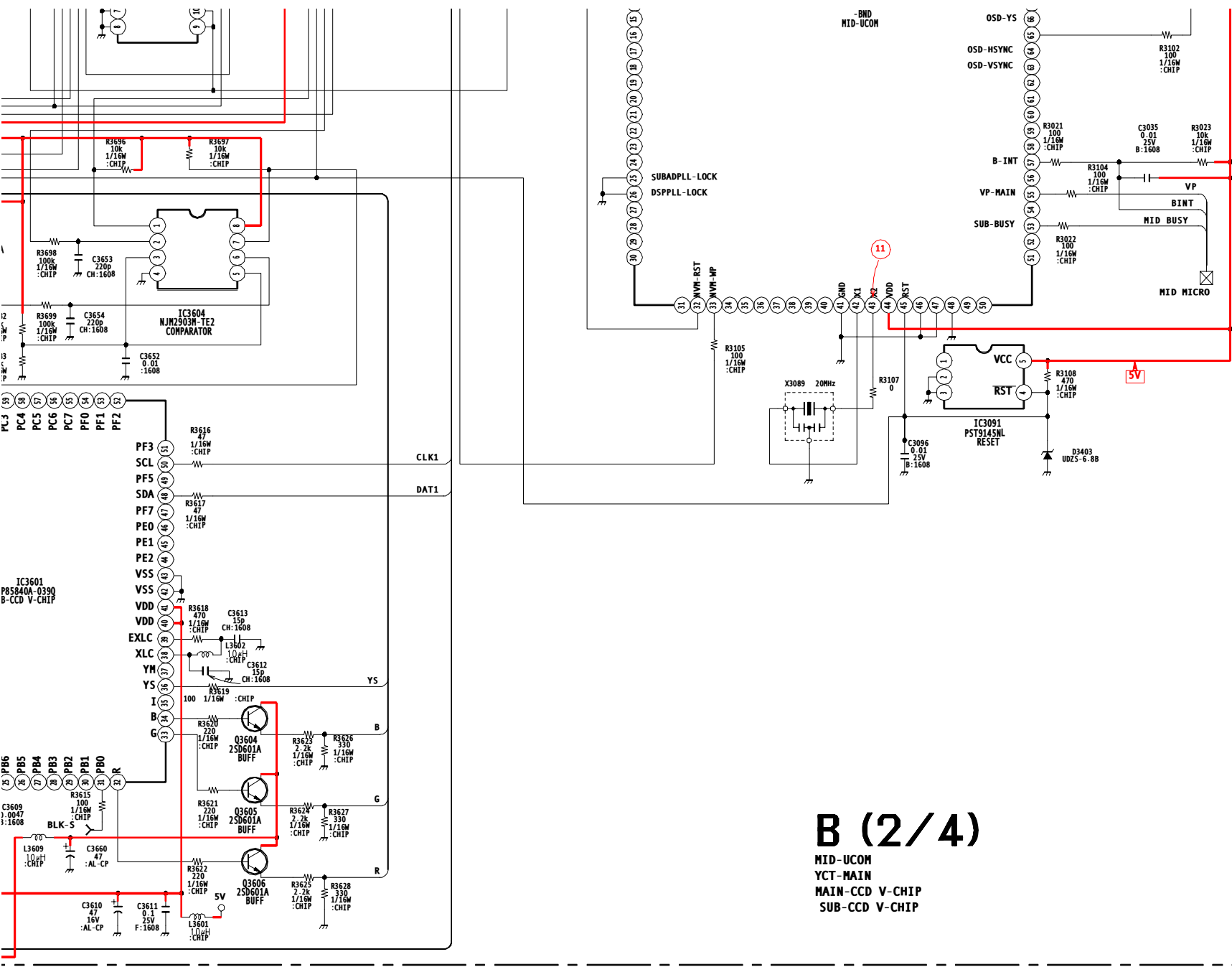
Q211	2.8	11.5	2.3	Q724	0.5	4.6	GND	Q7015	0.0	0.0	GND
Q212	5.6	9.0	5.0	Q726	4.6	0.1	4.6	Q7016	0.0	4.2	GND
Q214	0.0	0.0	GND	Q727	4.6	0.1	4.6		D	G	S
Q216	4.5	GND	3.9	Q728	0.1	4.6	GND	Q6007	150.4	4.7	0.0
Q217	2.2	8.7	3.9	Q729	0.1	4.6	GND	Q6008	303.0	154.6	150.0
Q701	4.7	4.7	5.0	Q730	10.4	0.7	10.2	All voltages are in V.			

<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>		<b>9</b>		<b>10</b>		<b>11</b>		<b>12</b>		<b>13</b>	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	-----------	--	-----------	--	-----------	--	-----------	--







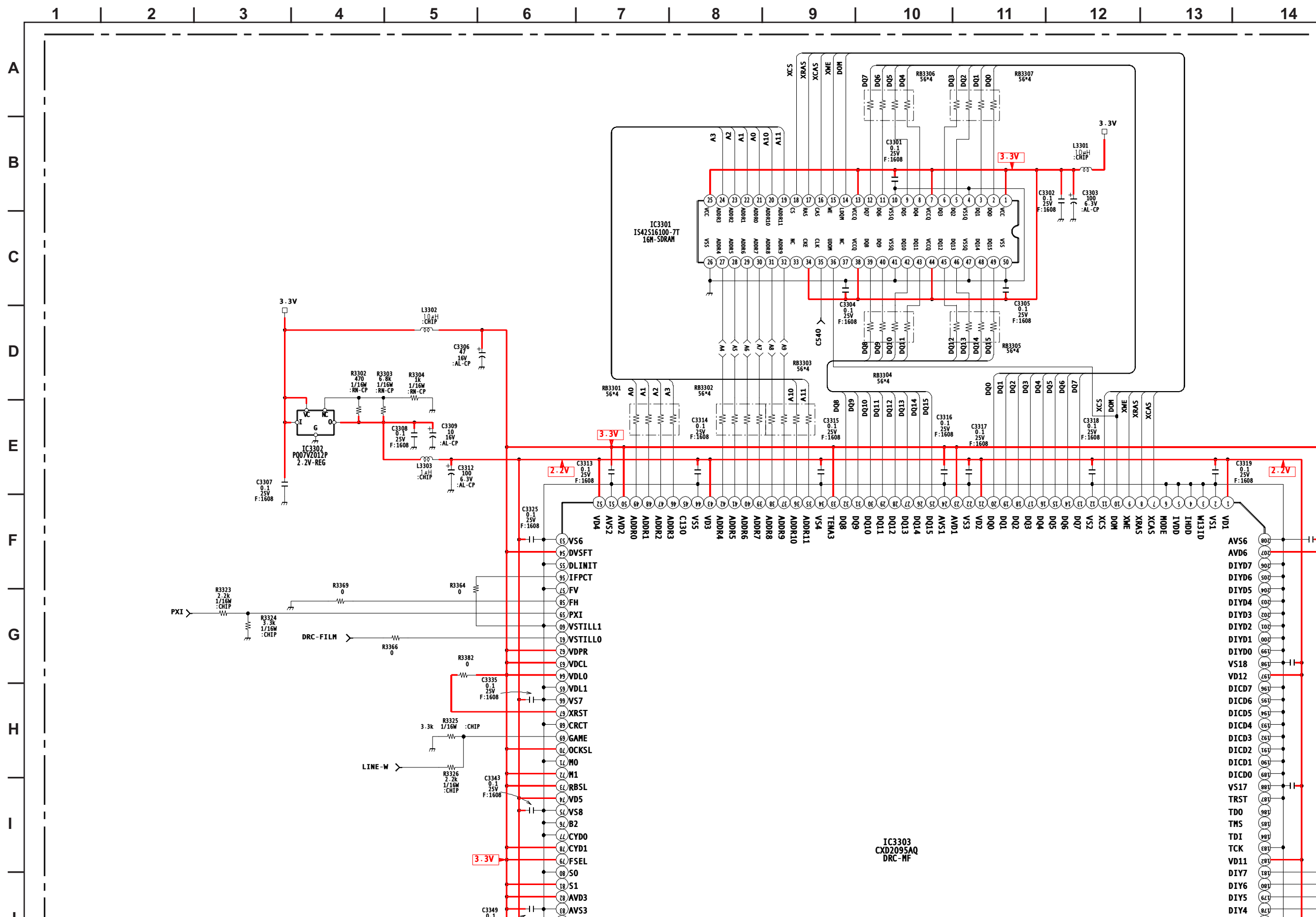


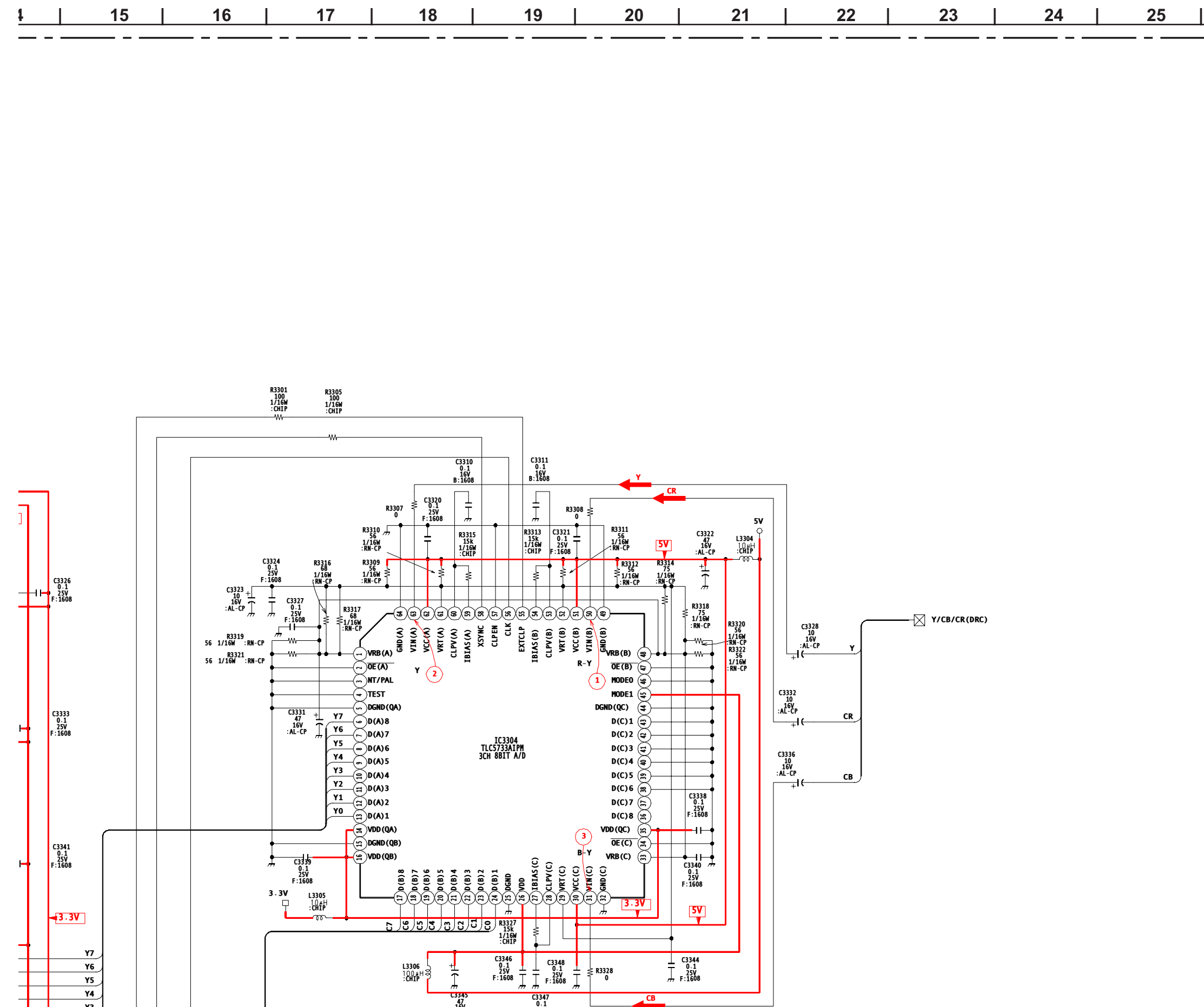
B (2/4)

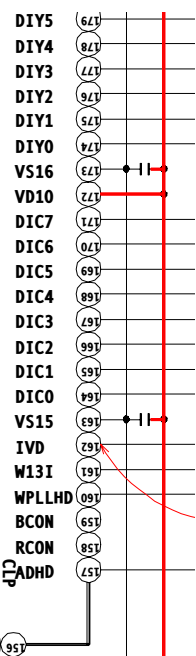
MID-UCOM  
YCT-MAIN  
MAIN-CCD V-CHIP  
SUB-CCD V-CHIP

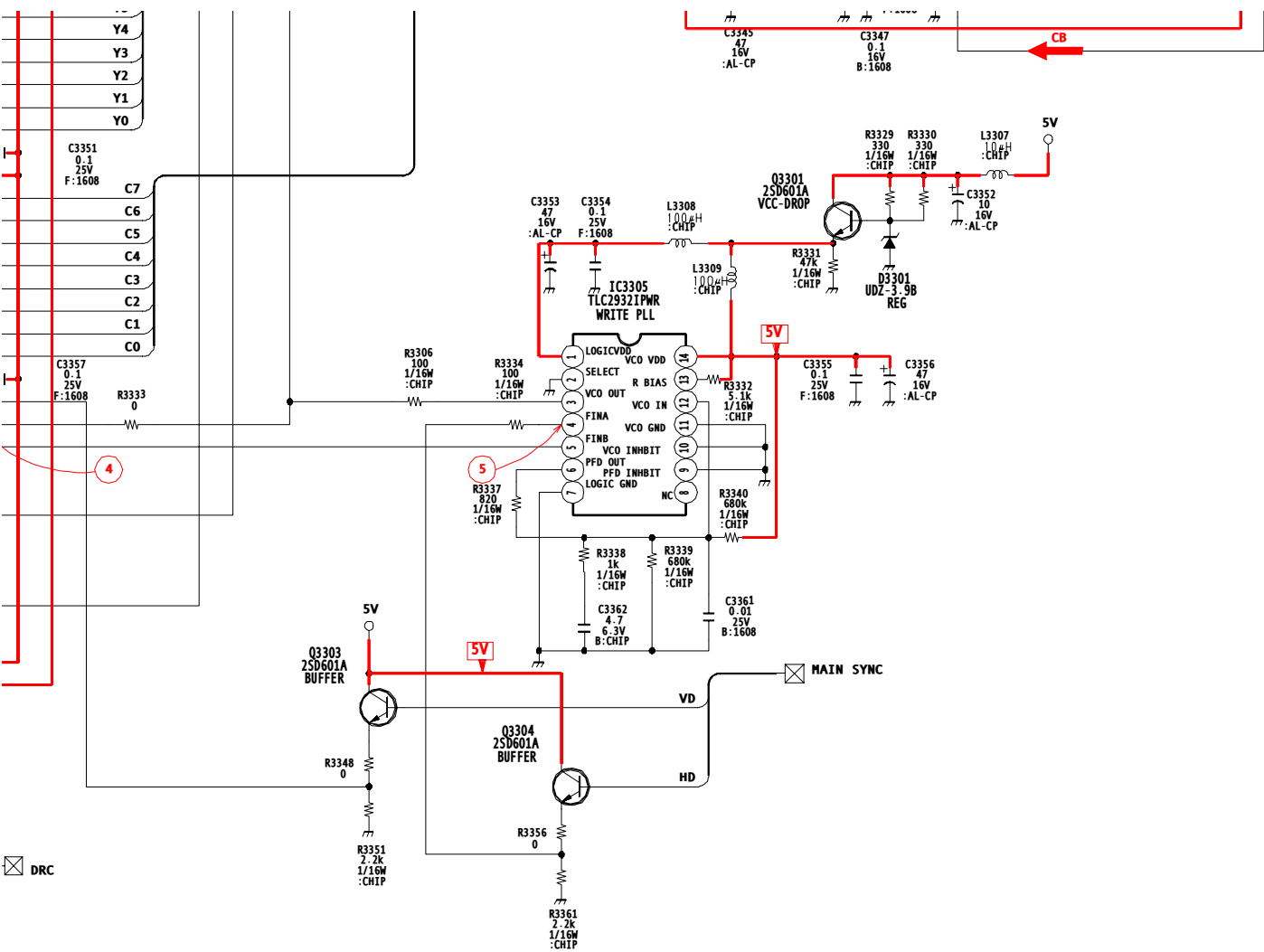


### B BOARD SCHEMATIC DIAGRAM (3 OF 4)



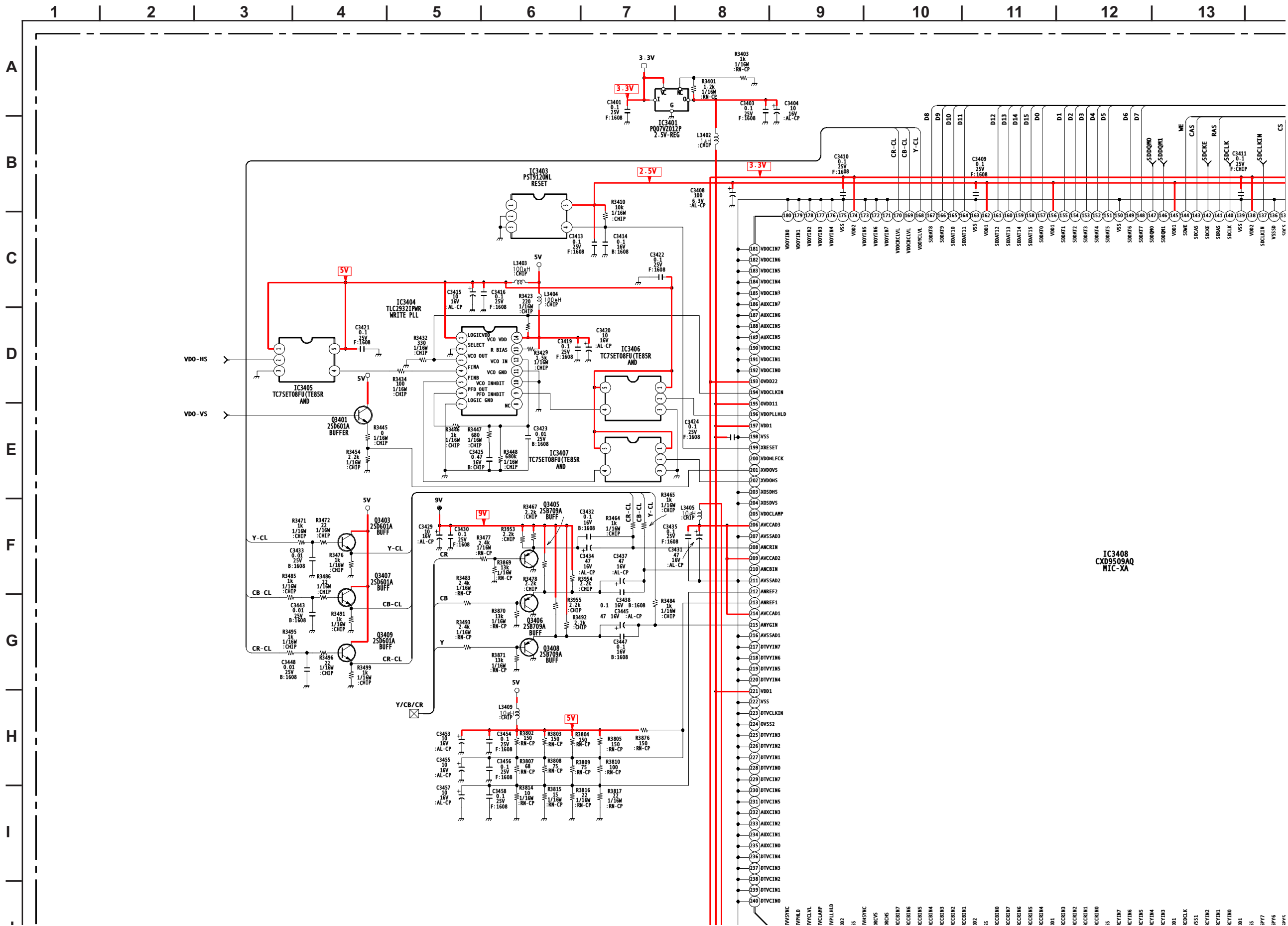




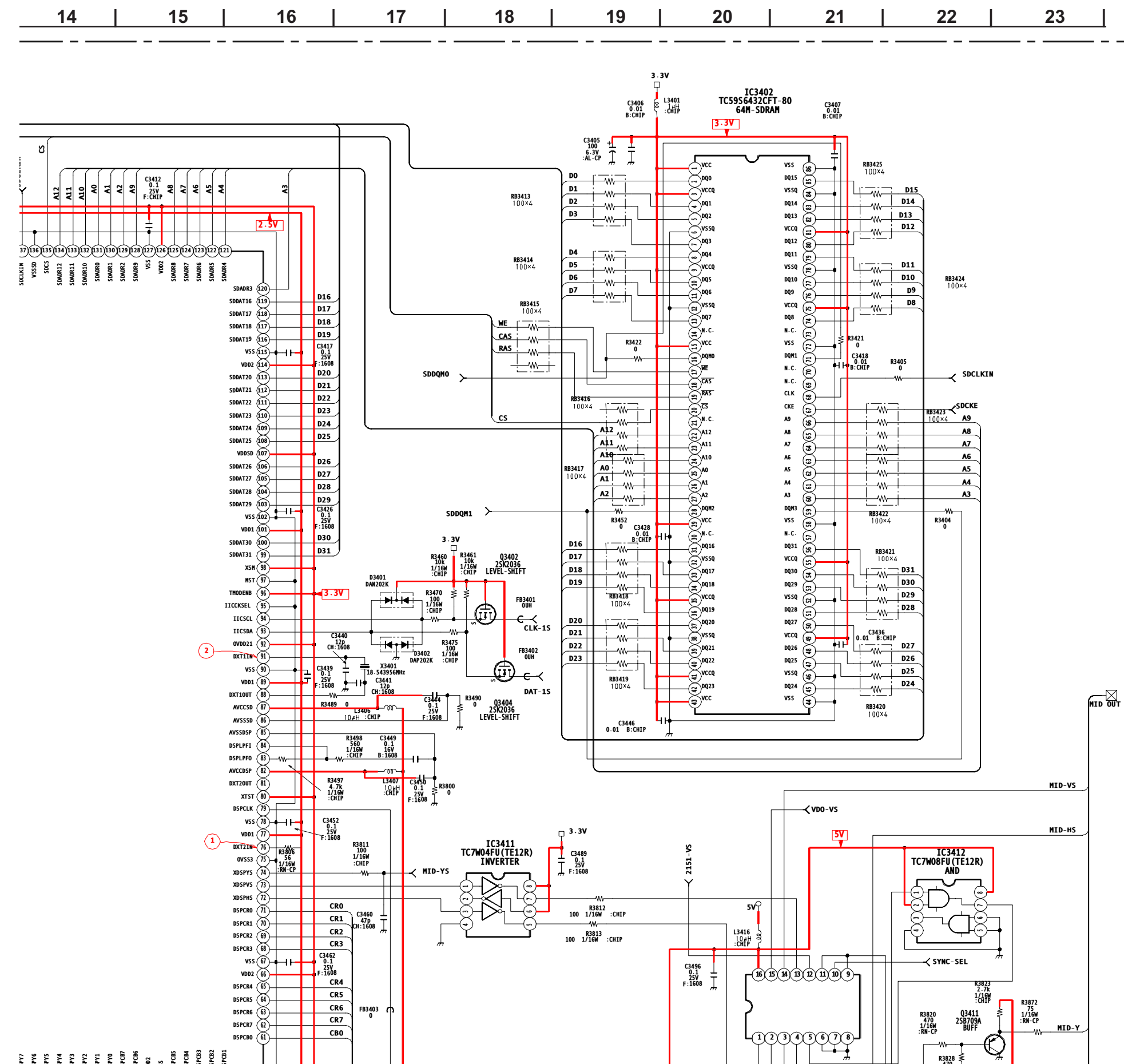


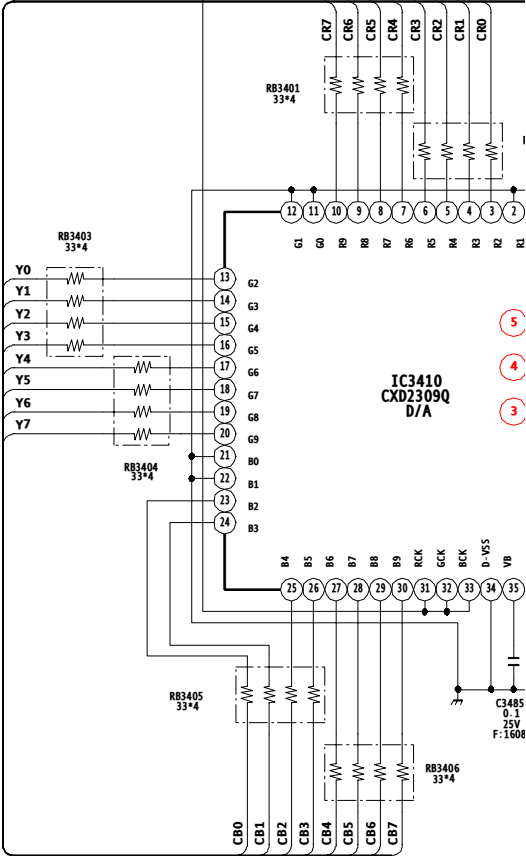
**B (3/4)**  
3CH 8BIT A/D  
DRC-MF

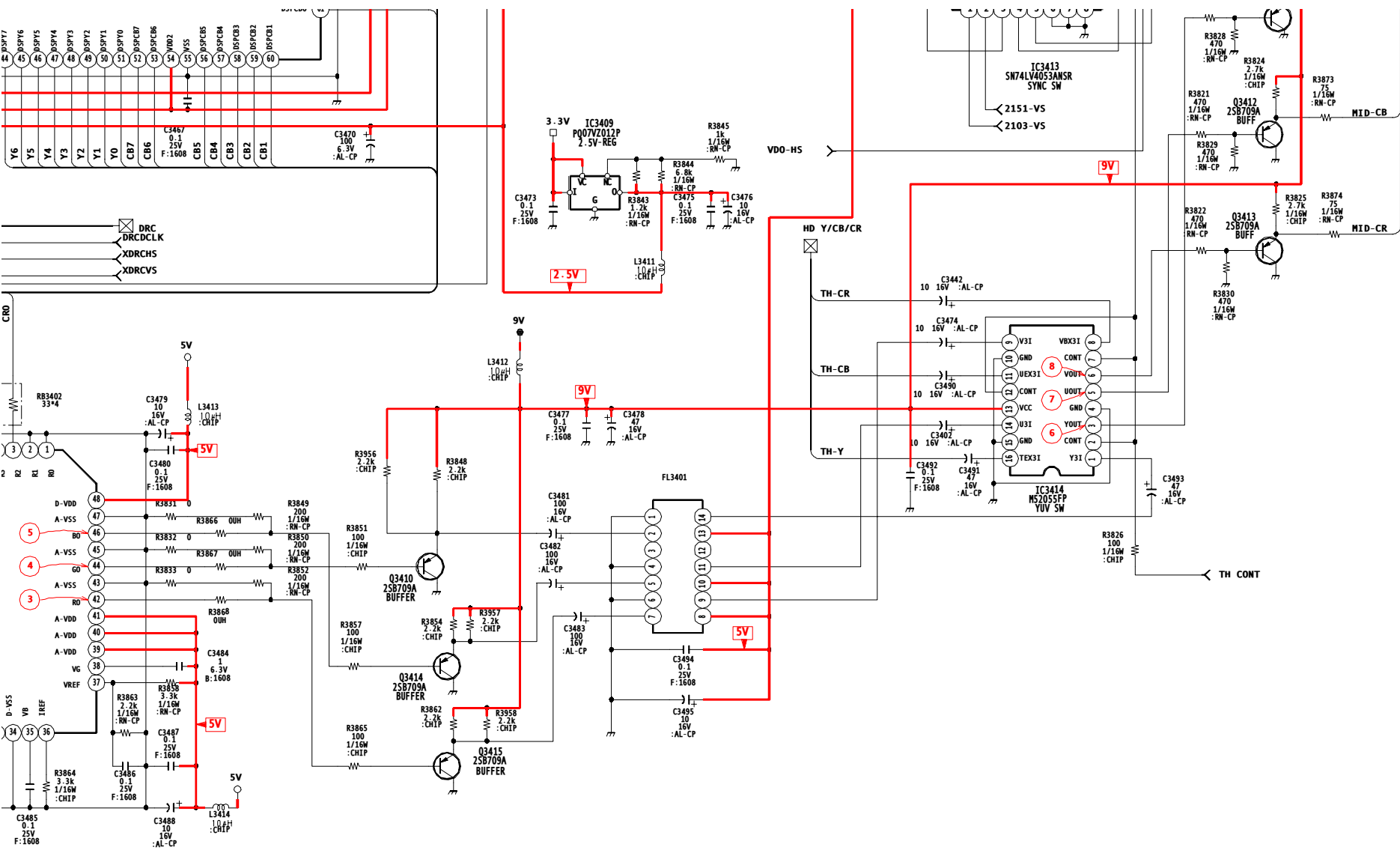
B BOARD SCHEMATIC DIAGRAM (4 OF 4)







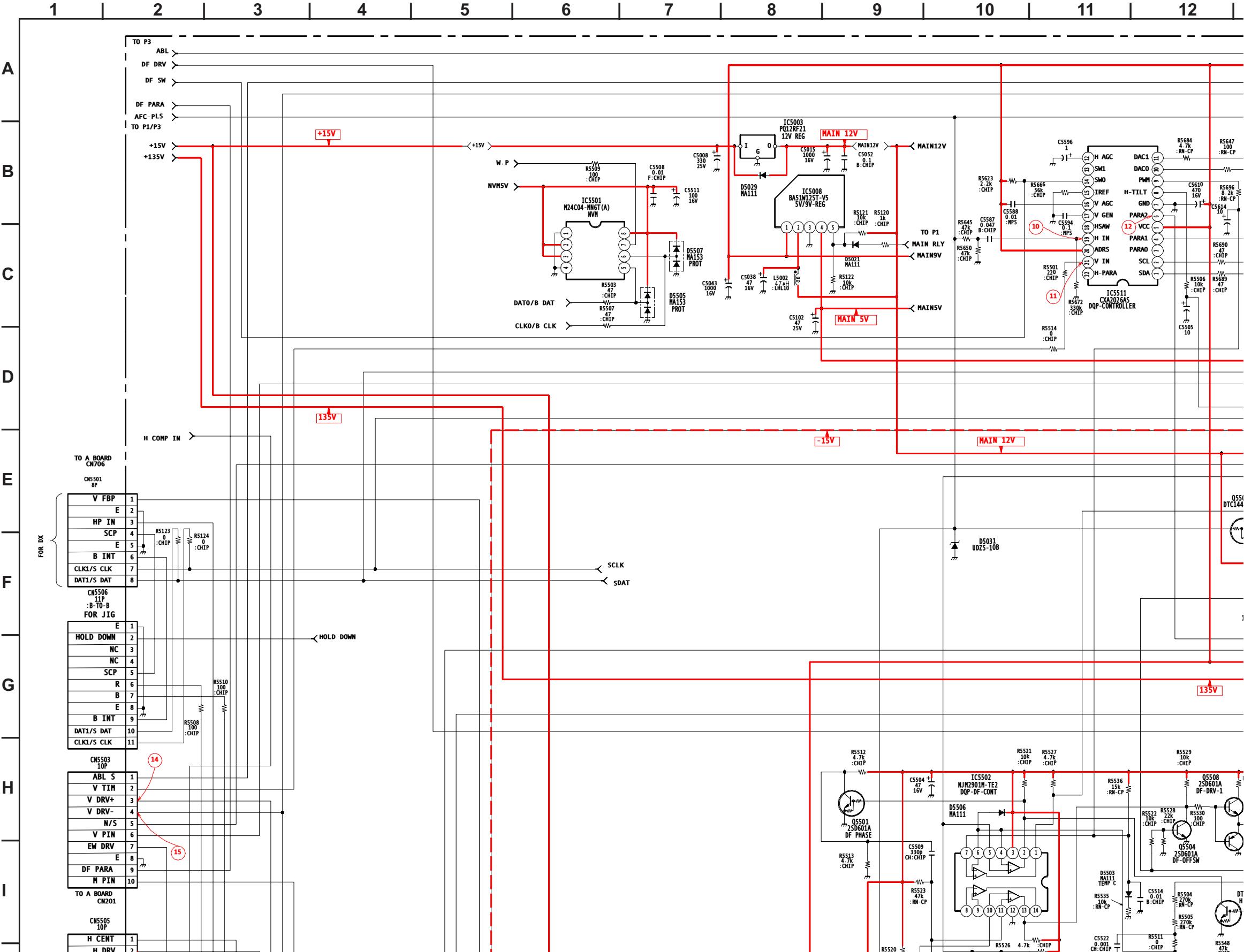


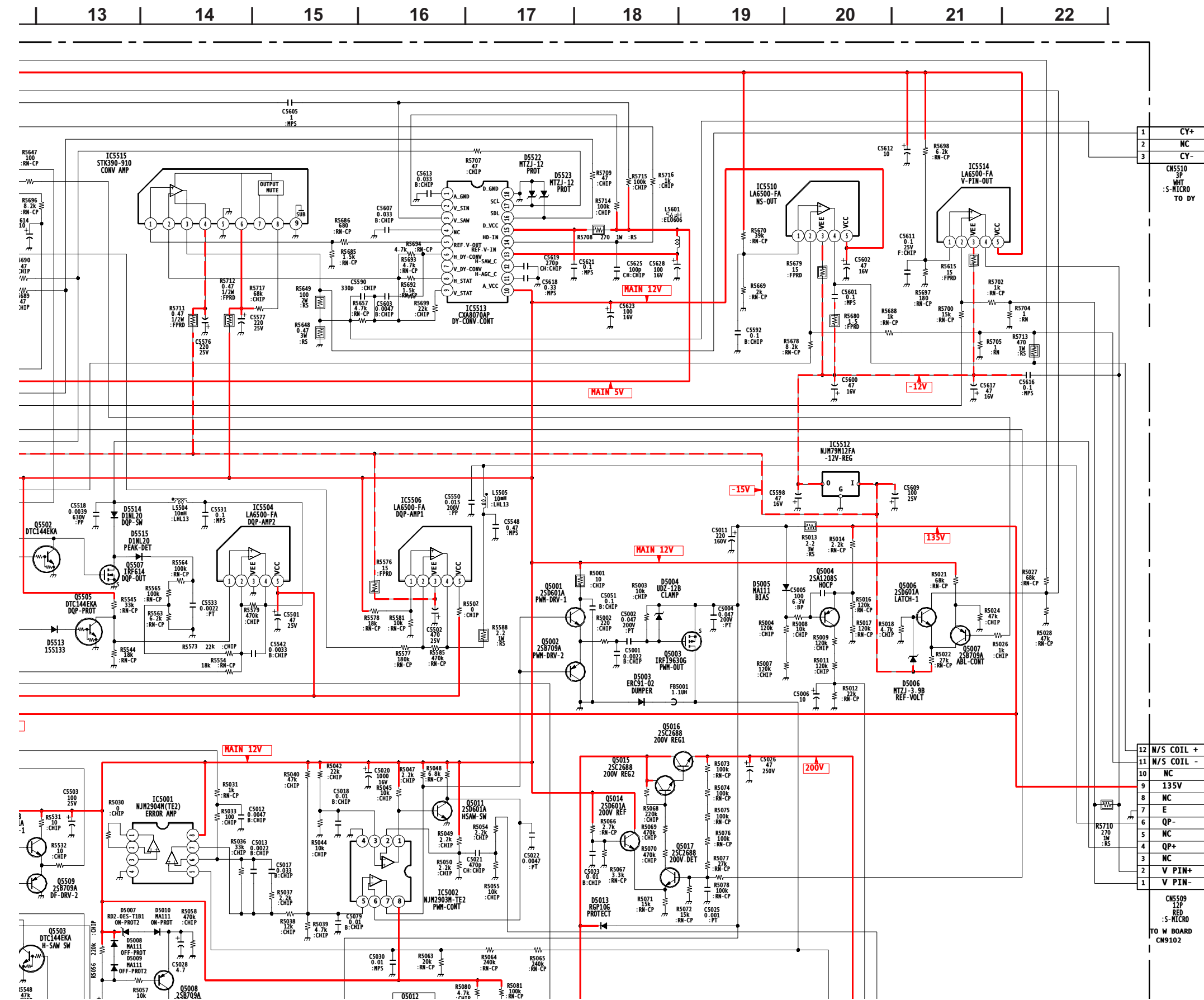


# B (4/4)

MID-XA  
A/D

D BOARD SCHEMATIC DIAGRAM (2 OF 3)











H/V DRIVE  
H/V DY

**DX1A-919-D**

## PRINTING THE SERVICE MANUAL

The PDF of this service manual is not designed to be printed from cover to cover. The pages vary in size, and must therefore be printed in sections based on page dimensions.

### NON-SCHEMATIC PAGES

Data that does NOT INCLUDE schematic diagrams are formatted to 8.5 x 11 inches and can be printed on standard letter-size and/or A4-sized paper.

### SCHEMATIC DIAGRAMS

The schematic diagram pages are provided in two ways, full size and tiled. The full-sized schematic diagrams are formatted on paper sizes between 8.5" x 11" and 18" x 30" depending upon each individual diagram size. Those diagrams that are LARGER than 11" x 17" in full-size mode have been tiled for your convenience and can be printed on standard 11" x 17" (tabloid-size) paper, and reassembled.

#### TO PRINT FULL SIZE SCHEMATIC DIAGRAMS

---

If you have access to a large paper plotter or printer capable of outputting the full-sized diagrams, output as follows:


- 1) Note the page size(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your large format printer. Confirm that the printer settings are set to output the indicated page size or larger.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

#### TO PRINT TILED VERSION OF SCHEMATICS

---

Schematic pages that are larger than 11" x 17" full-size are provided in a 11" x 17" printable tiled format near the end of the document. These can be printed to tabloid-sized paper and assembled to full-size for easy viewing.



If you have access to a printer capable of outputting the tabloid size (11" x 17") paper, then output the tiled version of the diagram as follows:


- 1) Note the page number(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your printer. Confirm that the plotter settings are set to output 11" x 17", or tabloid size paper in landscape (  ) mode.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

#### TO PRINT SPECIFIC SECTIONS OF A SCHEMATIC

---

To print just a particular section of a PDF, rather than a full page, access the Graphics Select tool in the Acrobat Reader tool bar.

- 1) To view the Graphics Select Tool, press and HOLD the mouse button over the Text Select Tool which looks like:   
This tool will expand to reveal to additional tools.  
Choose the Graphics Select tool by placing the cursor over the button on of the far right that looks like: 
- 2) After selecting the Graphics Select Tool, place your cursor in the document window and the cursor will change to a plus (+) symbol. Click and drag the cursor over the area you want to print. When you release the mouse button, a marquee (or dotted lined box) will be displayed outlining the area you selected.
- 3) With the marquee in place, go to the file menu and select the "Print..." option. When the print window appears, choose the option under the section called "Print Range" which says "Selected Graphic".

Select OK and the output will print only the area that you outlined with the marquee. 

(continued >)

## ON-SCREEN SEARCH OPTION

All of the text within the service manual PDF is content searchable. This means that you can enter any text, word, phrase or reference number that appears in the manual, and the PDF software will search, find and move the cursor to the location where you requested text first appears. This feature can be particularly useful in locating components on a specific schematic or printed wire circuit board (PWB) diagrams.

Follow these steps to effectively locate a component on a schematic diagram:

- 1) Locate the schematic you want to search by clicking on the corresponding bookmark on the left side of the screen. The view on the right of the screen will then jump to the desired schematic page.
- 2) Magnify the diagram to at least 400% before conducting a component search. This will enable you to easily view the reference number when it is highlighted on screen. To do this, click on the magnifying glass button on the tool bar at the top of the screen. Move the cursor over the diagram and RIGHT click you mouse. Select the 400% magnification option on the pop-up menu. Click on the button with the icon of the open hand to deactivate the magnification tool
- 3) Search the diagram (or the entire manual) by clicking on the binocular button tool at the top of the screen. The "Find" window will appear and allow you to type in your desired text. Type in a reference designator, such as R502, and click on the "Find" button. If the component is not on the diagram, but is listed anywhere else in the manual, the cursor will jump to the first location the text is found in the file. To find another instance of that same text, click on the binocular button again and select "Find Again."

**SONY**<sup>®</sup>

4-085-012-21



**FD Trinitron**  
**WEGA**<sup>TM</sup>

**XBR**

**Operating Instructions**

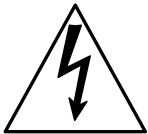
**KV-32XBR450   KV-36XBR450   KV-40XBR700**





## WARNING

To reduce the risk of fire or shock hazard, do not expose the TV to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

## CAUTION

When using TV games, computers, and similar products with your TV, keep the brightness and contrast functions at low settings. If a fixed (non-moving) pattern is left on the screen for long periods of time at a high brightness or contrast setting, the image can be permanently imprinted onto the screen. Continuously watching the same program can cause the imprint of station logos onto the TV screen. These types of imprints are not covered by your warranty because they are the result of misuse.

## Note on Caption Vision

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

## Note on Cleaning the TV

Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.

## Note to CATV System Installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

## NOTIFICATION

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

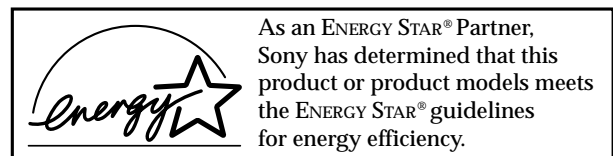
- ☐ Reorient or relocate the receiving antennas.
  - ☐ Increase the separation between the equipment and receiver.
  - ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - ☐ Consult the dealer or an experienced radio/TV technician for help.
- You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

## Safety

- ☐ Operate the TV only on 120 V AC.
- ☐ The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- ☐ If any liquid or solid object should fall inside the cabinet, unplug the TV immediately and have it checked by qualified service personnel before operating it further.

## Installing

- ☐ To prevent internal heat buildup, do not block the ventilation openings.
- ☐ Do not install the TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- ☐ The AC power cord is attached to the rear of the TV with hooks. Do not attempt to remove the cord from these hooks. Doing so could cause damage to the TV.



ENERGY STAR® is a U.S. registered mark.

# XBR

**TruSurround™**  
by **SRS** (●)®

TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and is protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents. Purchase of this product does not convey the right to sell recordings made with the TruSurround technology.

BBE and BBE Symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

FD Trinitron and the Wega logo are trademarks of Sony Corporation.

## Owner's Record

The model and serial numbers are provided on the front of this instruction manual and at the rear of the TV. Refer to them whenever you call upon your Sony dealer regarding this product.

# Important Safeguards

For your protection, please read these instructions completely, and keep this manual for future reference.

Carefully observe and comply with all warnings, cautions and instructions placed on the set or described in the operating instructions or service manual.

## WARNING

To guard against injury, the following basic safety precautions should be observed in the installation, use and servicing of the set.

## Use

### Power Sources

This set should be operated only from the type of power source indicated on the serial/model plate. If you are not sure of the type of electrical power supplied to your home, consult your dealer or local power company. For those sets designed to operate from battery power, refer to the operating instructions.



### Grounding or Polarization

This set is equipped with a polarized AC power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding). Follow the instructions below:

#### For the set with a polarized AC power cord plug

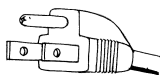
This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the polarized plug by forcing it in.



#### Alternate Warning

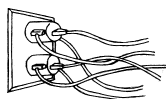
#### For the set with a three-wire grounding type AC plug

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.



### Overloading

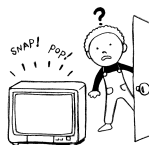
Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.



Always turn the set off when it is not being used. When the set is left unattended and unused for long periods of time, unplug it from the wall outlet as a precaution against the possibility of an internal malfunction that could create a fire hazard.



If a snapping or popping sound from a TV set is continuous or frequent while the TV is operating, unplug the TV and consult your dealer or service technician. It is normal for some TV sets to make occasional snapping or popping sounds, particularly when being turned on or off.



### Object and Liquid Entry

Never push objects of any kind into the set through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the set.



## Cleaning

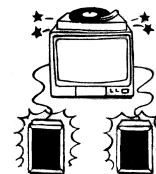
Unplug the set from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a cloth lightly dampened with water for cleaning the exterior of the set.



## Installation

### Attachments

Do not use attachments not recommended by the manufacturer, as they may cause hazards.



### Water and Moisture

Do not use power-line operated sets near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



### Accessories

Do not place the set on an unstable cart, stand, table or shelf. The set may fall, causing serious injury to a child or an adult and serious damage to the set. Use only a cart or stand recommended by Sony for the specific model of TV. No part of the TV set should overhang any edge of the TV cart or stand; any overhanging edge is a safety hazard. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



### Ventilation

The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of the set, and to protect it from overheating, these slots and openings must never be blocked or covered.

- ☐ Never cover the slots and openings with a cloth or other materials.
- ☐ Never block the slots and openings by placing the set on a bed, sofa, rug or other similar surface.
- ☐ Never place the set in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.
- ☐ Do not place the set near or over a radiator or heat register, or where it is exposed to direct sunlight.



## Power-Cord Protection

Do not allow anything to rest on or roll over the power cord, and do not place the set where the power cord is subject to wear or abuse.



## Antennas

### Outdoor Antenna Grounding

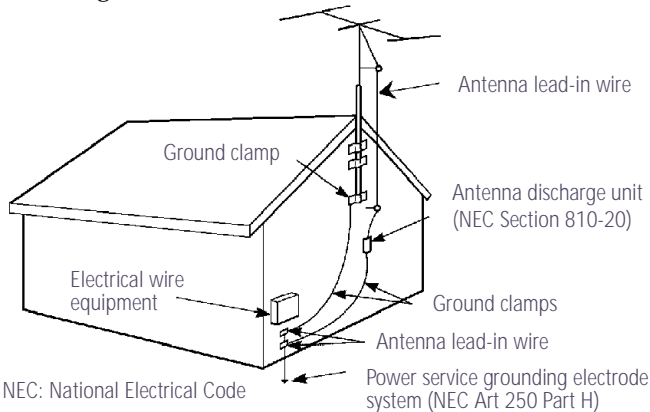
If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

**WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.**

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code (NEC) in USA and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

### Antenna Grounding According to the NEC

Refer to section 54-300 of Canadian Electrical Code for Antenna Grounding.



NEC: National Electrical Code

## Lightning

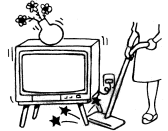
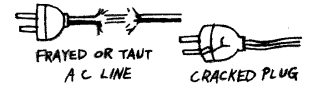
For added protection for this television receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the receiver due to lightning and power-line surges.

## Service

### Damage Requiring Service

Unplug the set from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- ☐ When the power cord or plug is damaged or frayed.
- ☐ If liquid has been spilled into the set.
- ☐ If the set has been exposed to rain or water.
- ☐ If the set has been subject to excessive shock by being dropped, or the cabinet has been damaged.
- ☐ If the set does not operate normally when following the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the set to normal operation.



- ☐ When the set exhibits a distinct change in performance, it indicates a need for service.

### Servicing

Do not attempt to service the set yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



### Replacement Parts

When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock or other hazards.

### Safety Check

Upon completion of any service or repairs to the set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the set is in safe operating condition, and to so certify. When the set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the set.







---

# Contents

## *Introducing the FD Trinitron Wega*

Overview .....	1
Presenting the FD Trinitron Wega.....	2
Package Contents .....	3
Using the Remote Control .....	3

## *Installing the TV*

Overview .....	7
TV Controls and Connectors .....	8
Basic Connection (Connecting Cable TV or Antenna) .....	10
Connecting a VCR and Cable.....	14
Connecting a VCR and Cable Box .....	15
Connecting Two VCRs for Tape Editing .....	18
Connecting a Satellite Receiver .....	19
Connecting a Satellite Receiver with a VCR ...	20
Connecting an Audio Receiver .....	22
Connecting a DVD Player with Component Video Connectors.....	23
Connecting a DVD Player with A/V Connectors .....	24
Connecting a Digital TV Receiver .....	25
Connecting a Camcorder .....	26
Using the CONTROL S Feature .....	27
Setting Up the TV Automatically .....	28

## *Using the Features*

Overview.....	29
Using Favorite Channels.....	30
Using Twin View .....	31
Using the Freeze Function .....	34

## *Using the Menus*

Overview.....	35
Using the Video Menu .....	36
Using the Audio Menu .....	38
Using the Channel Menu .....	40
Using the Parent Menu .....	42
Using the Timer Menu .....	46
Using the Setup Menu.....	47

## *Other Information*

Overview.....	49
Programming the Remote Control.....	50
Operating Other Equipment with Your TV Remote Control .....	53
Troubleshooting .....	55
Specifications .....	57
Index .....	59



# Introducing the FD Trinitron Wega

## Overview

This chapter defines the contents of your Wega TV and provides an overview of how to set up and use basic features.

<i>Topic</i>	<i>Page</i>
Presenting the FD Trinitron Wega	2
Package Contents	3
Using the Remote Control	3

## Presenting the FD Trinitron Wega

The FD Trinitron Wega (pronounced VAY-GAH) is characterized by outstanding contrast, uncompromising accuracy, and corner-to-corner detail.

You'll recognize the superiority of Wega technology almost immediately. The first thing you'll notice is minimal glare from the flat picture tube. This flat-screen technology improves picture detail without distortion, unlike conventional curved screens. The FD Trinitron delivers outstanding image detail not only at the screen center, but also at the corners — so you can enjoy a bright, clear picture from any location in a room.

---

### Features

Some of the features that you will enjoy with your new TV include:

- ❑ **DRC Mode (Digital Reality Creation):** Unlike conventional line doublers, the DRC feature doubles vertical and horizontal lines, resulting in four times the density for quality sources such as DVD, Satellite and Digital camcorder.
- ❑ **Cinemotion:** Provides an optimized display by automatically detecting film content and applying a reverse 3/2 pulldown process. Moving pictures will appear clearer and more natural-looking.
- ❑ **Twin View™:** Using Multi-Image Driver (MIDX), Twin View allows you to watch two programs side by side, with the ability to zoom in one picture. You can watch pictures from two different sources simultaneously.
- ❑ **16:9 Enhancement:** Vertical Compression technology that maximizes picture resolution on “anamorphic” or “enhanced for widescreen” sources, including selected DVDs.
- ❑ **Velocity Modulation:** Vertical line enhancement that sharpens picture definition.
- ❑ **Steady Sound:** Equalizes volume levels so there is consistent output between programs and commercials.
- ❑ **Parental Control:** V-Chip technology allows parents to block unsuitable programming for younger viewers.
- ❑ **Component Video Inputs:** Offers the best video quality for DVD (480p, 480i), and Digital Set-top box (HD1080i) connections.
- ❑ **S VIDEO Inputs:** Provides a high-quality video signal from connected equipment.
- ❑ **Favorite Channel Preview:** Preview up to eight favorite channels without leaving the current channel.

## Package Contents

Along with your new Trinitron TV, the packaging box contains a remote control and two AA batteries. These items are all you need to set it up and operate the TV in its basic configuration.

Most peripherals come with the necessary cables to connect them. If you want to set up special configurations, you may need to buy extra cables or connectors. It is best to ensure that you have all needed materials on hand before beginning a special-connection project.

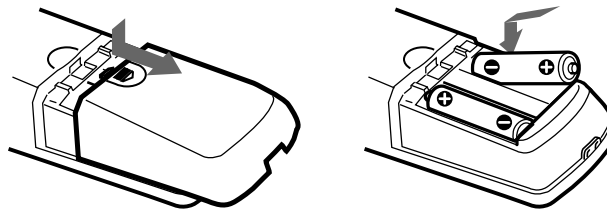
## Using the Remote Control

The remote control is the primary mechanism for controlling your TV. Handle the remote control with care; avoid dropping it, getting it wet, placing it in direct sunlight, near a heater, or where the humidity is high.

---

### Inserting Batteries

Insert two size AA (R6) batteries (supplied) by matching the + and – on the batteries to the diagram inside the battery compartment.

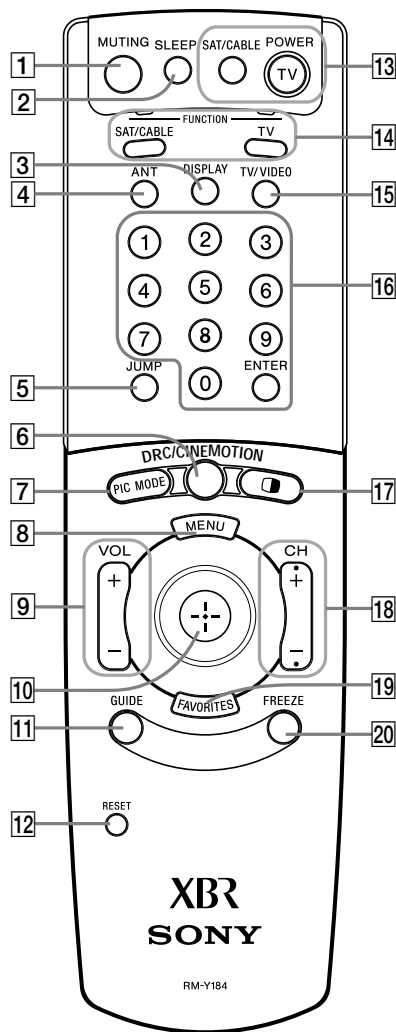



Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.





The following table describes the buttons on the remote control that are for more advanced functions.

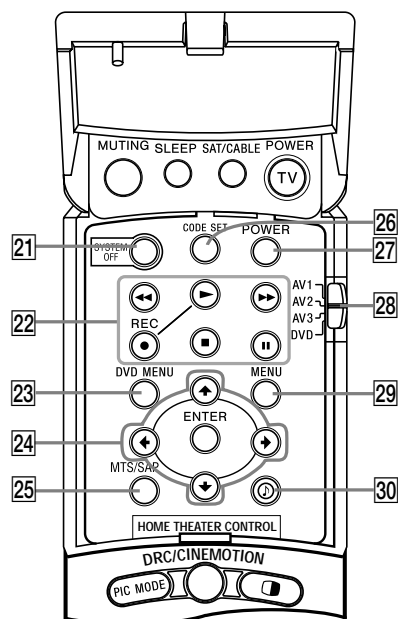
## Button Descriptions



 To scan rapidly through the channels, press and hold down the CH+ or CH- button.

Button	Description
<b>1</b> MUTING	Press to mute the sound. Press again or press VOL + to restore the sound.
<b>2</b> SLEEP	Press repeatedly until the TV displays the time in minutes (15, 30, 45, 60, or 90) that you want the TV to remain on before shutting off automatically. Cancel by pressing until SLEEP OFF appears. While Sleep feature is set, press once to view remaining time.
<b>3</b> DISPLAY	Press once to display the current time and channel label (if set) and channel number. Press again to turn Display off. See page 46 for details on setting the time.
<b>4</b> ANT	Changes between the VHF/UHF input to the AUX input.
<b>5</b> JUMP	Press to jump back and forth between two channels. The TV alternates between the current channel and the last channel that was selected.
<b>6</b> DRC/ CINEMOTION	For high quality sources (i.e., DVD player, Satellite Receiver), this button cycles through the available high-resolution picture modes: Interlaced, Progressive, Cinemotion. Also available in the Video menu. For details, see “Selecting Video Options” on page 36.
<b>7</b> PIC MODE	Cycles through the available video picture modes: Vivid, Standard, Movie, Pro. Also available in the Video menu. For details, see “Selecting Video Options” on page 36.
<b>8</b> MENU	Press to display the TV on-screen menu. Press again to exit from the menus.
<b>9</b> VOL +/-	Adjusts the volume.
<b>10</b> 	Joystick allows for movement of the on-screen cursor. Pressing down on the center of the joystick selects the item.
<b>11</b> GUIDE	Displays the satellite program guide.
<b>12</b> RESET	Press when in a menu to reset the settings to the factory defaults.
<b>13</b> POWER buttons (GREEN)	Turn on and off the TV and SAT/CABLE equipment you have programmed into the remote control. For instructions, see “Programming the Remote Control” on page 50.
<b>14</b> FUNCTION buttons	Select the equipment (TV or SAT/CABLE) that you want to operate. The indicator lights up momentarily when pushed to show which device the remote control is operating.

<i>Button</i>	<i>Description</i>
<b>15</b> TV/VIDEO	Cycles through the video equipment connected to you TV's video inputs: TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4, VIDEO 5, VIDEO 6.
<b>16</b> 0 – 9 and ENTER	Press 0 - 9 to select a channel, the channel changes after 2 seconds. Press ENTER to select immediately.
<b>17</b> 	Turns on/off Twin View. For details, see "Using Twin View" on page 31.
<b>18</b> CH +/-	Scan through channels.
<b>19</b> FAVORITES	Displays the Favorite Channels list. For details, see "Using Favorite Channels" on page 30.
<b>20</b> FREEZE	Freezes the window picture. Press again to restore the picture.



<b>21</b>	<b>SYSTEM OFF</b>	Powers off all Sony equipment at once. (This feature may not work with older Sony equipment.)
<b>22</b>	<b>VCR/DVD CONTROLS</b>	
		Rewind
	REC	Record
		Fast-forward
		Play
		Stop
		Pause
<b>23</b>	<b>DVD MENU</b>	Displays the DVD Disc menu
<b>24</b>	and ENTER	Used for DVD on-screen menu movement and selection
<b>25</b>	<b>MTS/SAP</b>	Cycles through the Multi-channel TV Sound (MTS) options: Stereo, Auto-SAP (Second Audio Program), and Mono. For details, see "Using the Audio Menu" on page 38.
<b>26</b>	<b>CODE SET</b>	Used for programming the remote control to operate non-Sony video equipment. For details, see "Programming the Remote Control" on page 50.
<b>27</b>	<b>POWER button (GREEN)</b>	Turn on and off the VCR/DVD equipment you have programmed into the remote control. For instructions, see "Programming the Remote Control" on page 50.
<b>28</b>	AV1 AV2 AV3 DVD	Use to switch control for connected video equipment. You can program one video source for each switch position. (For details, see "Programming the Remote Control" on page 50.)
<b>29</b>	<b>MENU</b>	Used for DVD player setup menu.
<b>30</b>		Switches Steady Sound on/off. For details, see page 38.

# Installing the TV

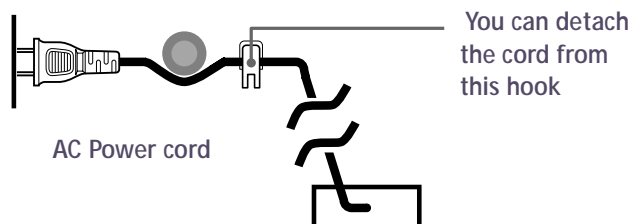
## Overview

This chapter includes illustrated instructions for setting up your TV.

<i>Topic</i>	<i>Page</i>
TV Controls and Connectors	8
Basic Connection (Connecting Cable TV or Antenna)	10
Connecting a VCR and Cable	14
Connecting a VCR and Cable Box	15
Connecting Two VCRs for Tape Editing	18
Connecting a Satellite Receiver	19
Connecting a Satellite Receiver with a VCR	20
Connecting an Audio Receiver	22
Connecting a DVD Player with Component Video Connectors	23
Connecting a DVD Player with A/V Connectors	24
Connecting a Digital TV Receiver	25
Connecting a Camcorder	26
Using the CONTROL S Feature	27
Setting Up the TV Automatically	28

### *Note About the AC Power Cord*

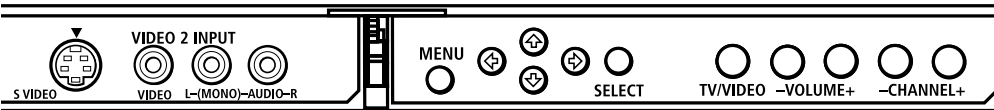
The AC power cord is attached to the rear of the TV with a hook. Use caution when removing the AC plug from its holder. Gently slide the plug in the upward direction to remove from hook. Once removed, the AC power plug should automatically disengage from its stored location.



## TV Controls and Connectors

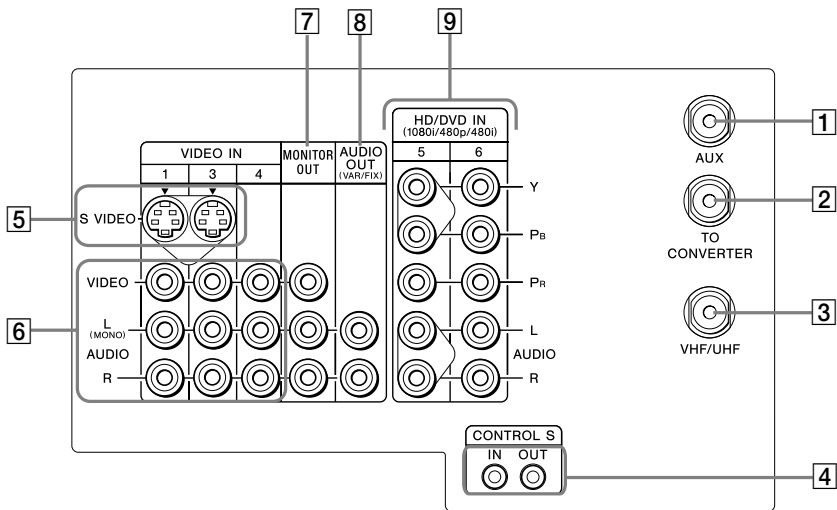
### Front Panel Menu Controls

The front panel menu controls allow access to the on-screen menus without the use of a remote control. Pressing the MENU button brings up the on-screen menus. The arrow buttons move the on-screen cursor in the menus and the SELECT button selects the menu item.



(Illustrations in this manual are based upon the KV-32/36XBR450; the front panel of the KV-40XBR700 is functionally the same, but has slight cosmetic differences.)

### TV Rear Panel



Connection	Description
1 AUX	Allows you to view local and cable channels if your cable provider does not feature local channels. You can switch between local and cable channels by pressing ANT on the remote control. Devices connected to the AUX input can be viewed only in the Twin View left picture.
2 TO CONVERTER	This is a VHF/UHF OUT jack that lets you set up your TV to switch between scrambled channels (through a cable box) and normal cable channels (CATV). Use this jack instead of a splitter to get better picture quality when switching between scrambled and unscrambled cable channels.



<i>Connection</i>	<i>Description</i>
<b>3</b> VHF/UHF	Connects to your VHF/UHF antenna or cable.
<b>4</b> CONTROL S IN/OUT	Allows the TV to receive (IN) and send (OUT) remote control signals to other Sony infrared-controlled audio or video equipment.
<b>5</b> S VIDEO	Connects to the S VIDEO OUT jack of your VCR or other S VIDEO-equipped video equipment. Provides better picture quality than the VHF/UHF jacks or the Video IN jack.
<b>6</b> VIDEO/AUDIO [L(MONO)/R]	Connect to the audio and video OUT jacks on your VCR or other video equipment. A video input (VIDEO 2) is located on the front panel of the TV. The Audio and Video IN jacks provide better picture quality than the VHF/UHF IN jack.
<b>7</b> MONITOR OUT	Lets you record the program you are watching to a VCR. When two VCRs are connected, you can use your TV as a monitor for tape-to-tape editing (not available with 480p or 1080i when the input is to VIDEO 5 or 6).
<b>8</b> AUDIO OUT (VAR/FIX) L (MONO)/R	Connect to the left and right audio inputs of your audio or video equipment.
<b>9</b> HD/DVD IN (1080i/480p/480i)	Connect to your DVD player's or Digital Set-top box's component video (Y, PB, PR) and audio (L/R) jacks.

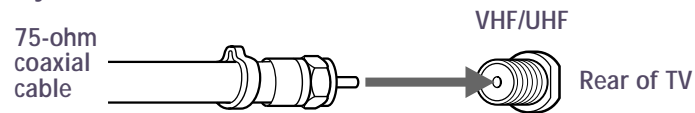
## Basic Connection (Connecting Cable TV or Antenna)

### Connecting Directly to Cable or to an Antenna

The connection you choose depends on the cable found in your home.

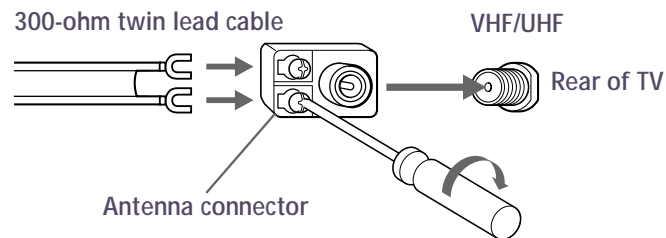
Newer homes are usually equipped with standard coaxial cable:

VHF Only or VHF/UHF or Cable



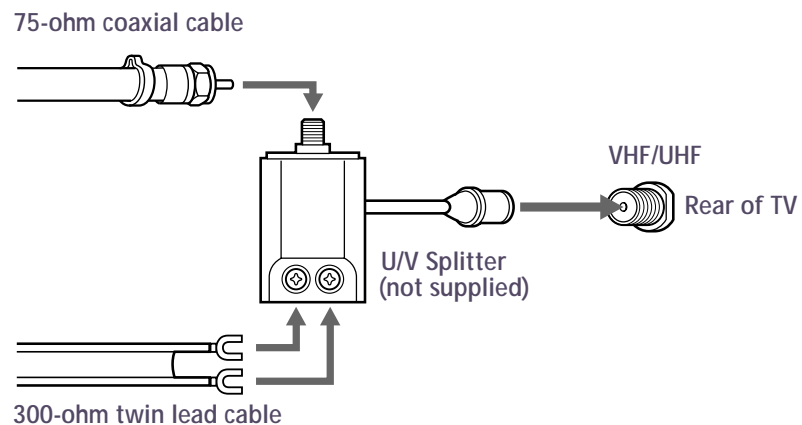
Older homes may have 300-ohm twin lead cable:

VHF Only or UHF Only or VHF/UHF



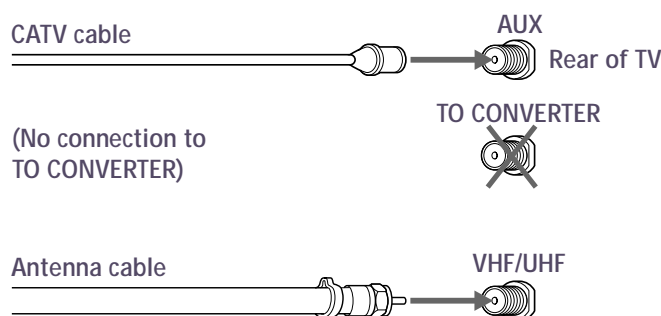
Some homes may have both:

VHF and UHF



## Cable and Antenna

If your cable provider does not feature local channels, you may find this set-up convenient.



Select CABLE or antenna (ANT) mode by pressing ANT on the remote control.

To receive channels using an antenna, instead of the CATV cable:

- 1 Select antenna mode by pressing ANT on the remote control.
- 2 Turn the cable to OFF (see page 40).
- 3 Perform the Auto Program function (see page 40).

## Cable Box Connections

### Cable Box and Cable

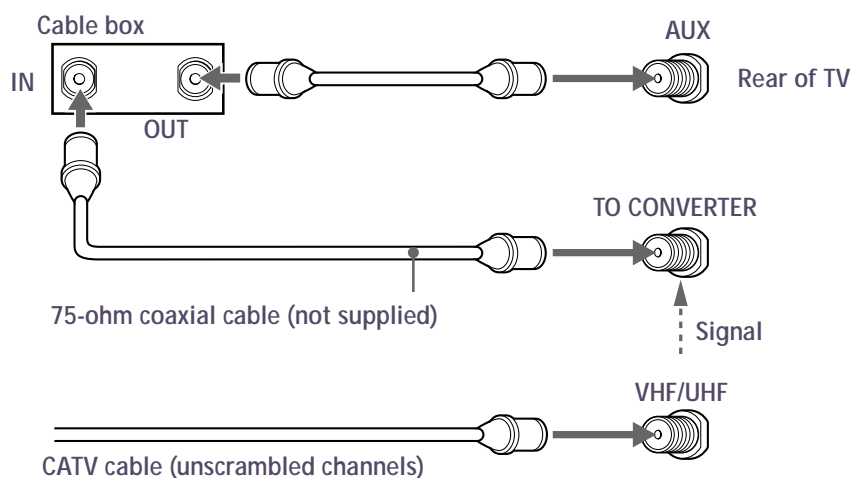
This is the preferred basic cable TV hookup to use if your cable TV company scrambles some channels, but not all of them (pay channels vs. regular cable channels), so you need to use a cable box.

With this setup you can:

- ☐ Use the TV remote control to change channels using your cable box when the signal is scrambled.
- ☐ Use the TV remote control to change channels using your TV when the signal is not scrambled. (Your TV's tuner provides a better signal than the cable box.)
- ☐ Use the Twin View feature. (When all channels are routed through your cable box, only one signal is sent to the TV, so you can not use the Twin View feature.)
- ☐ Use the Twin View feature normally with the CATV input.
- ☐ Use the Twin View feature partially with the cable box. (When you switch the TV input to AUX - to use the cable box - the unscrambled picture from the cable box will display. You can display the signal from both AUX and VHF/UHF inputs in the left Twin View picture, but you can display only the signal from the VHF/UHF input in the right Twin View picture.)

To set up your TV to use both a Cable Box and a direct-connect CATV cable:

- 1 Connect the Cable TV cable to the TV's VHF/UHF jack.
- 2 Using a coaxial cable, connect the TV's TO CONVERTER jack to the cable box's IN jack. The TV's internal converter allows you to switch between unscrambled signals coming straight into the TV and scrambled signals coming in through the cable box, eliminating the need for an external splitter.
- 3 Using a coaxial cable, connect the cable box's OUT jack to the TV's AUX jack.



To switch between channels from Cable Box and channels coming directly into TV

- ❑ Press the **ANT** button on the TV remote control.

To use the TV remote control to switch channels on the cable box

- ❑ Program the remote control as necessary. (See “Programming the Remote Control” on page 50.)

To use the cable box

- ❑ Have your TV tuner set to channel 3 or 4 (as appropriate) and then use the Cable Box to change channels.

To prevent the accidental switching of TV channels

- ❑ When using the VCR or Cable Box, you can use the Channel Fix feature to lock in a channel. The Channel Fix feature is under the Channel menu. (See “Using the Channel Menu” on page 40.)

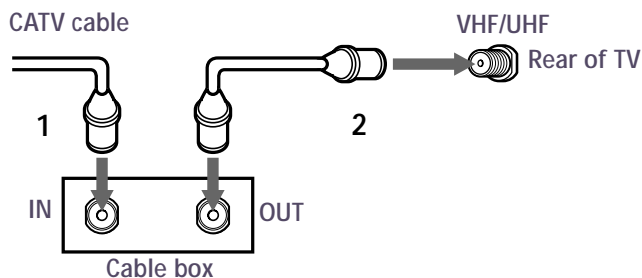
**Cable Box Only**

Use this hookup if:

- ☐ You subscribe to a cable TV system that uses scrambled or encoded signals requiring a cable box to view all channels, and
- ☐ You do not intend to hook up any other audio or video equipment to your TV.

When all channels are routed through your cable box, only one unscrambled signal is sent to the TV, so you cannot use the Twin View feature. If some channels are scrambled, but others are not, consider using the hookup on page 12 instead.

- 1 Connect the coaxial connector from your cable service to the cable box's IN jack.
- 2 Using a coaxial cable, connect the cable box's OUT jack to the TV's VHF/UHF jack.

**To use the cable box**

- ☐ Have the TV tuner set to channel 3 or 4 (as appropriate) and then use the cable box to change channels.

**To use the TV remote control to switch channels on the cable box**

- ☐ Program the remote control as necessary. For details, see "Programming the Remote Control" on page 50.

**To prevent accidental switching of TV channels**

- ☐ Use the Channel Fix feature to lock in a channel. The Channel Fix feature is under the Channel menu. For details, see "Using the Channel Menu" on page 40.



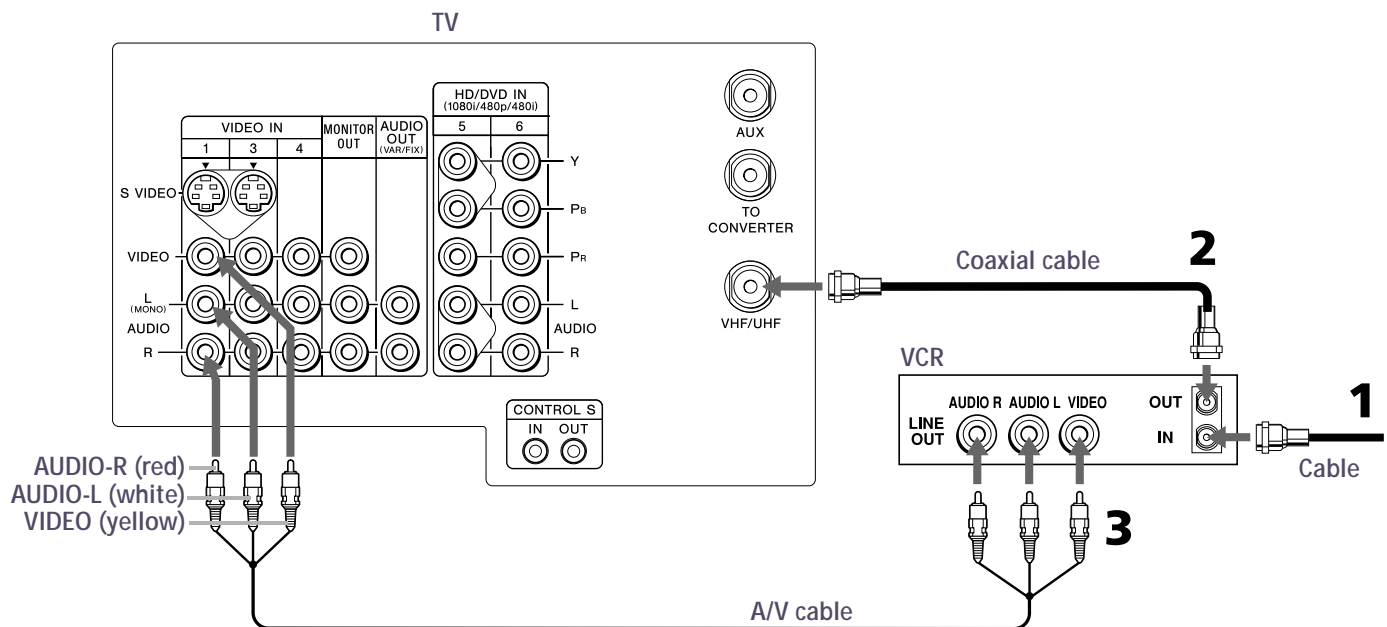
## Connecting a VCR and Cable

Use this hookup if you have cable TV that does not require a cable box.

- 1 Connect the cable TV cable to the VCR's IN jack.
- 2 Using a coaxial cable, connect the VCR's OUT jack to the TV's VHF/UHF jack.
- 3 Using an A/V cable, connect the VCR's Audio and Video OUT jacks to the TV's Audio and Video IN jacks.



If the VCR you are connecting has an S VIDEO jack, you can use an S VIDEO cable for improved picture quality (compared to a combination audio/video cable). Because an S VIDEO cable carries only the video signal, you will need audio cables for sound.



## Connecting a VCR and Cable Box

Use this hookup if:


- ☐ Your cable TV company scrambles some channels, but not all of them (pay channels vs. regular cable channels), so you need to use a cable box, and
- ☐ You want to use the Twin View feature.

With this setup you can:

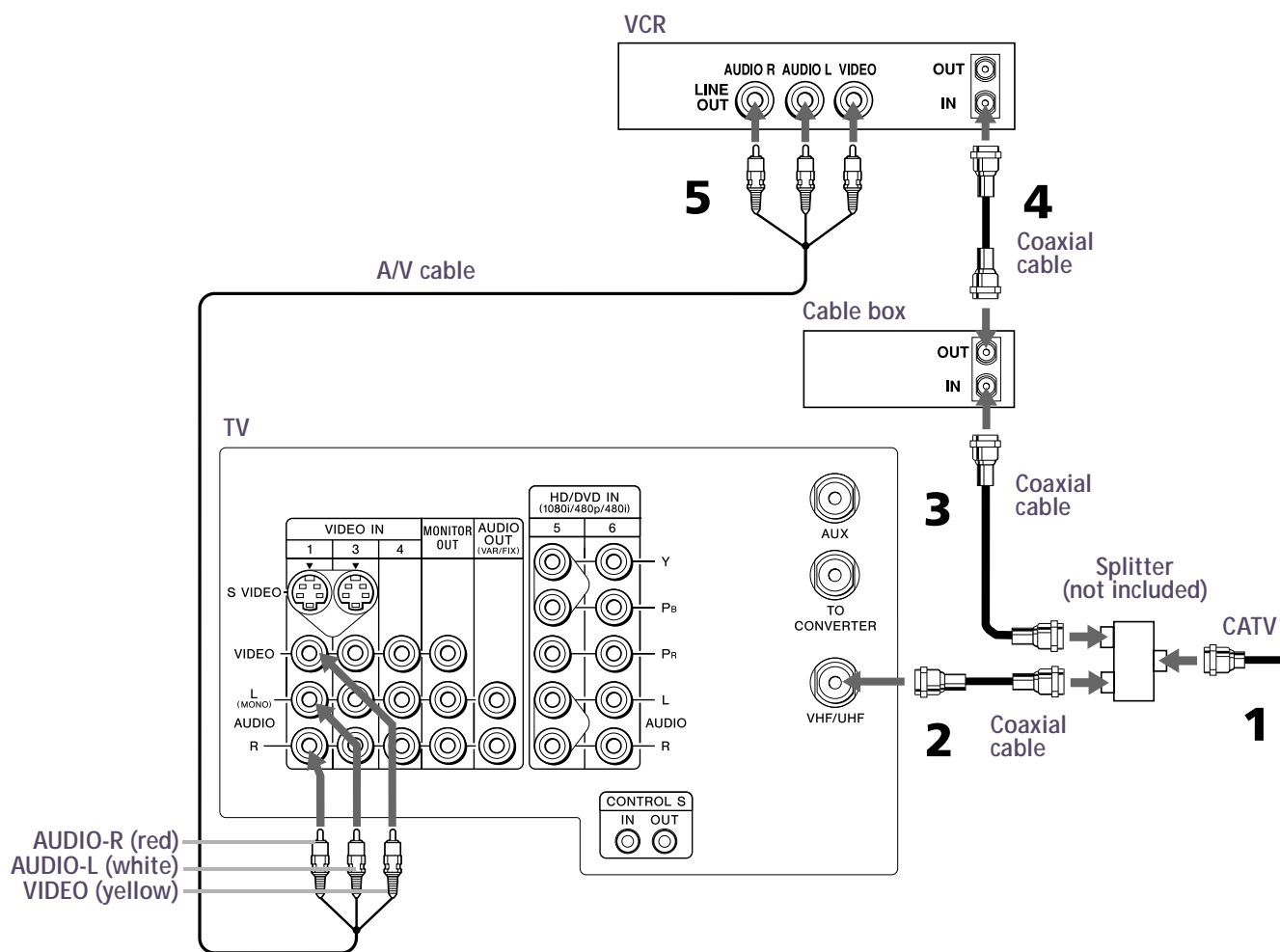
- ☐ Use the TV remote control to change channels using your cable box when the signal is scrambled.
- ☐ Use the TV remote control to change channels using your TV when the signal is not scrambled. (Your TV's tuner provides a better signal than the cable box.)
- ☐ Use the Twin View feature.
- ☐ Record both regular CATV and scrambled channels.

To connect a cable box and a VCR, you will need:

- ☐ A small, inexpensive device known as a splitter.
  - ☐ Three coaxial cables.
  - ☐ Either a combination audio/video cable, or an S VIDEO cable and audio cables.
- 1 Connect the CATV cable to the single (input) jack of the splitter.
  - 2 Use a coaxial cable to connect one of the two output jacks of the splitter to the TV's VHF/UHF jack.
  - 3 Use a coaxial cable to connect the other output jack of the splitter to the input jack of the cable box.
  - 4 Use a coaxial cable to connect the output jack of the cable box to the input jack of the VCR.
  - 5 Use the video line (yellow) of a combination audio/video (A/V) cable to connect the video output jack of the VCR to the video input jack of the TV.

 If your VCR has an S VIDEO jack, you can substitute an S VIDEO cable for the video line of an A/V cable. The S VIDEO cable will provide improved video signal quality. (You will need audio cables for sound.)

Connect the left (white) and right (red) audio output channels of the VCR to the respective input channels on the TV.



To switch between channels from cable box and channels from CATV

- ❑ Press the TV/VIDEO button on the TV remote control.

To view cable box signals

- ❑ Match (channel 3 or 4) the channel setting of the VCR IN with the cable box OUT.

To use the TV remote control to change channels on the cable box

- ❑ Program the remote control as necessary. (For details, see "Programming the Remote Control" on page 50.) Then use the remote control to change the cable box channels.

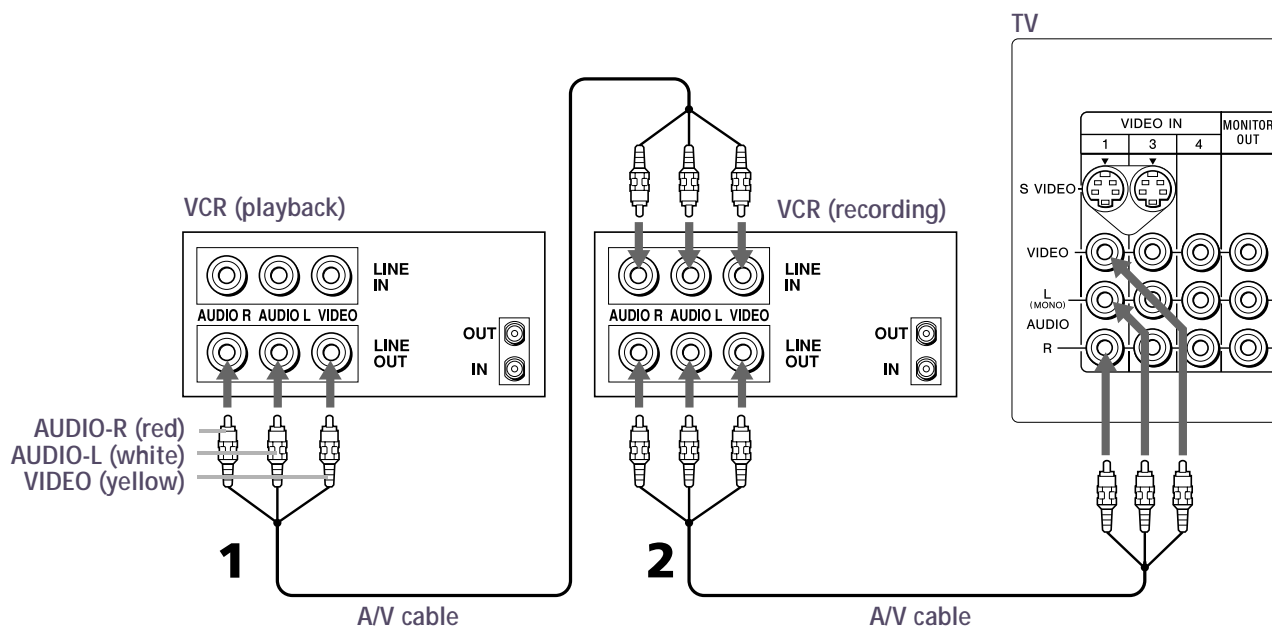
To use Twin View with the cable box

- ❑ Turn on the VCR. (The VCR's tuner is used as one of the Twin View picture sources; if you do not turn on the VCR, the Twin View will not work.) Use the remote control's TV/VIDEO button to set the Twin View output to VIDEO 1. Change one Twin View channel by changing channels on the cable box.

## Connecting Two VCRs for Tape Editing

If you connect two VCRs, so you can record from one to the other, you can connect the recording VCR into your TV to monitor what is being recorded. The procedure below shows you how to do this.

- 1 Using an A/V cable, connect the playback VCR's Audio and Video OUT jacks to the recording VCR's Audio and Video IN jacks.
- 2 Using an A/V cable, connect the recording VCR's Audio and Video OUT jacks to the TV's Audio and Video IN jacks.



To change the video input of the VCR

- See your VCR's user guide for instructions.

To view what is being recorded

- Use the remote control to set the TV to the video input to which the recording VCR is connected. (VIDEO 1 in the illustration above.)



If the VCRs you are connecting have S VIDEO jacks, you can use S VIDEO cables for improved picture quality (compared to a combination audio/video cable). Because S VIDEO cables carry only the video signal, you will need audio cables for sound.

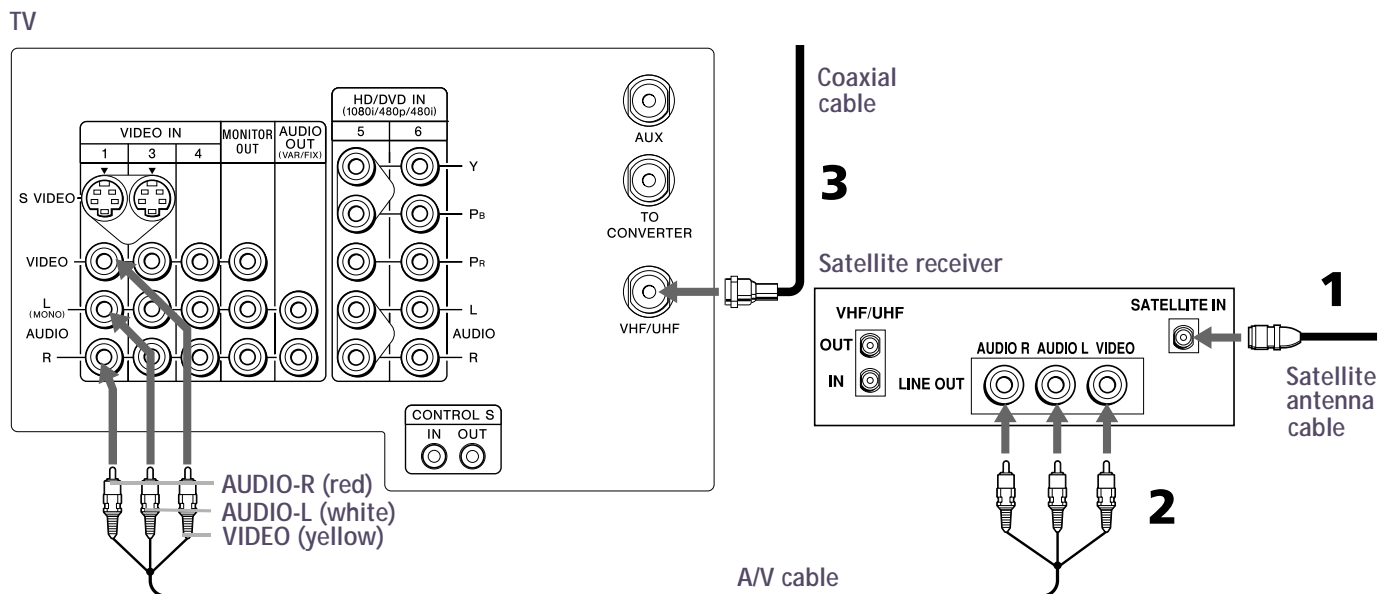


## Connecting a Satellite Receiver

- 1 Connect the satellite antenna cable to the satellite receiver's SATELLITE IN jack.
- 2 Using an A/V cable, connect the satellite receiver's Audio and Video OUT jacks to the TV's Audio and Video IN jacks.
- 3 Connect a coaxial cable from your cable or antenna to the TV's VHF/UHF jack.

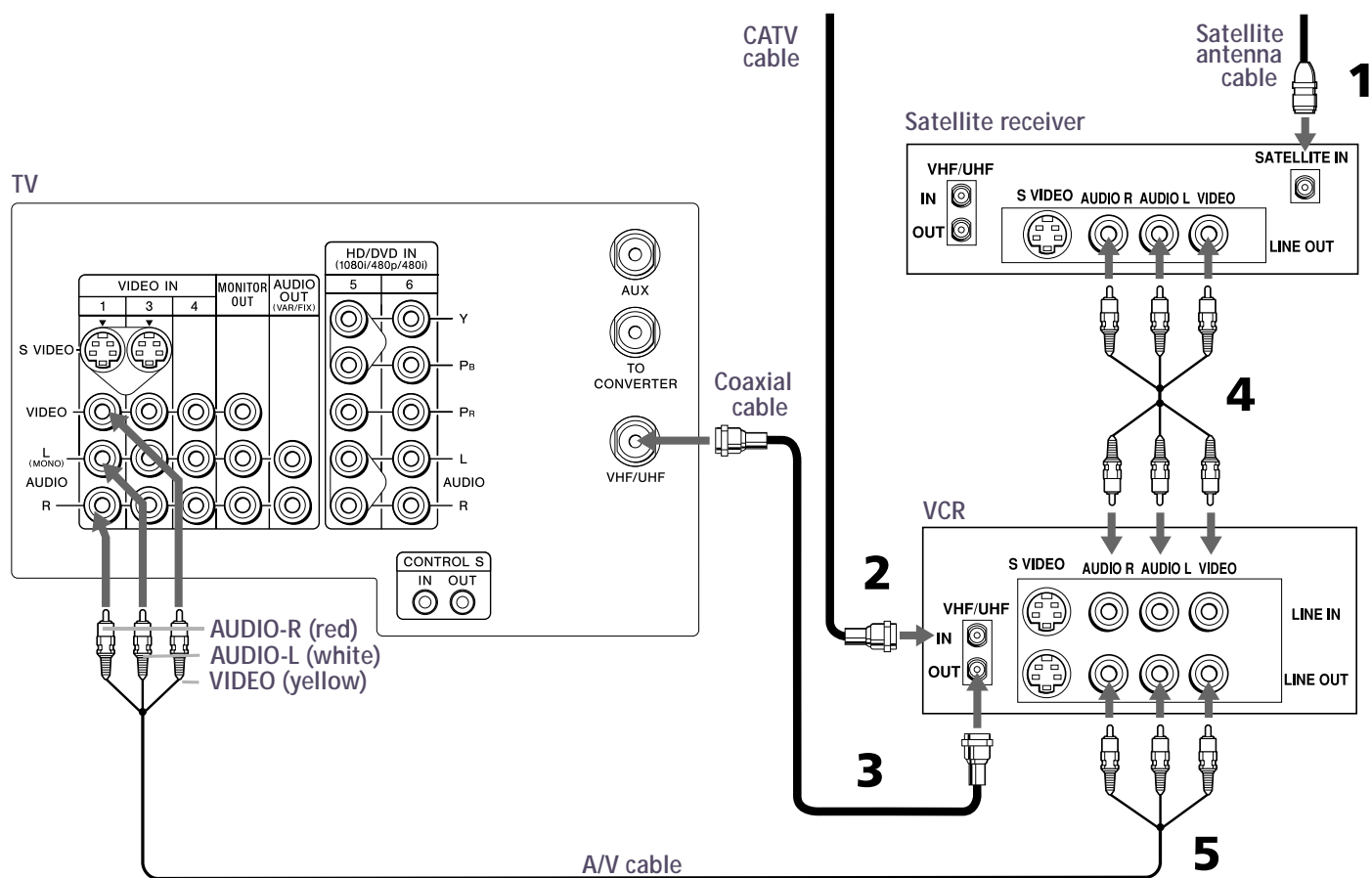



If the receiver you are connecting has an S VIDEO jack, you can use an S VIDEO cable for improved picture quality (compared to a combination audio/video cable). Because S VIDEO cables carry only the video signal, you will need audio cables for sound.



## Connecting a Satellite Receiver with a VCR

- 1 Connect the satellite antenna cable to the satellite receiver's SATELLITE IN jack.
- 2 Connect the CATV cable to the VCR's VHF/UHF IN jack.
- 3 Using a coaxial cable, connect the VCR's OUT jack to the TV's VHF/UHF jack.
- 4 Using an A/V cable, connect the satellite receiver's Audio and Video OUT jacks to the VCR's Audio and Video IN jacks.
- 5 Using an A/V cable, connect the VCR's Audio and Video OUT jacks to the TV's Audio and Video IN jacks.



 If the peripherals you are connecting have S VIDEO jacks, you can use S VIDEO cables for improved picture quality (compared to combination audio/video cables). Because S VIDEO cables carry only the video signal, you will need audio cables for sound.

- 6** If necessary, change the video input on your VCR. (See your VCR's user's guide for instructions on how to do that.)

To watch satellite TV, or the VCR

- ☐ Press TV/VIDEO on the remote control to select a video source.

To watch cable TV

- ☐ Press TV/VIDEO on the remote control to select VHF/UHF (to select the CATV cable on the TV).

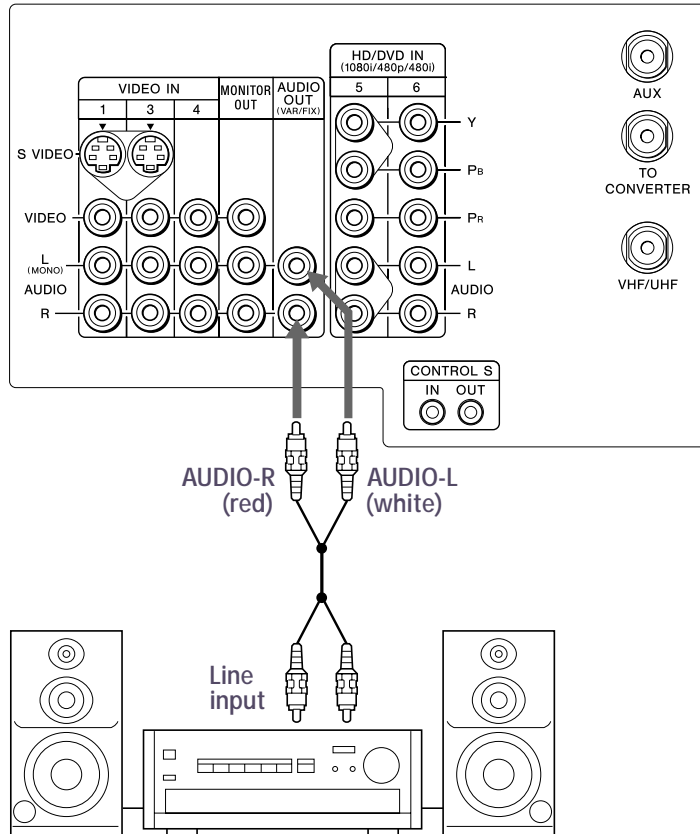
## Connecting an Audio Receiver

For better sound quality, you may want to connect your TV to your stereo system's audio receiver.

To connect to an audio receiver

- Use audio cables to connect the TV's Audio OUT jacks to the audio receiver's audio LINE IN jacks.


TV



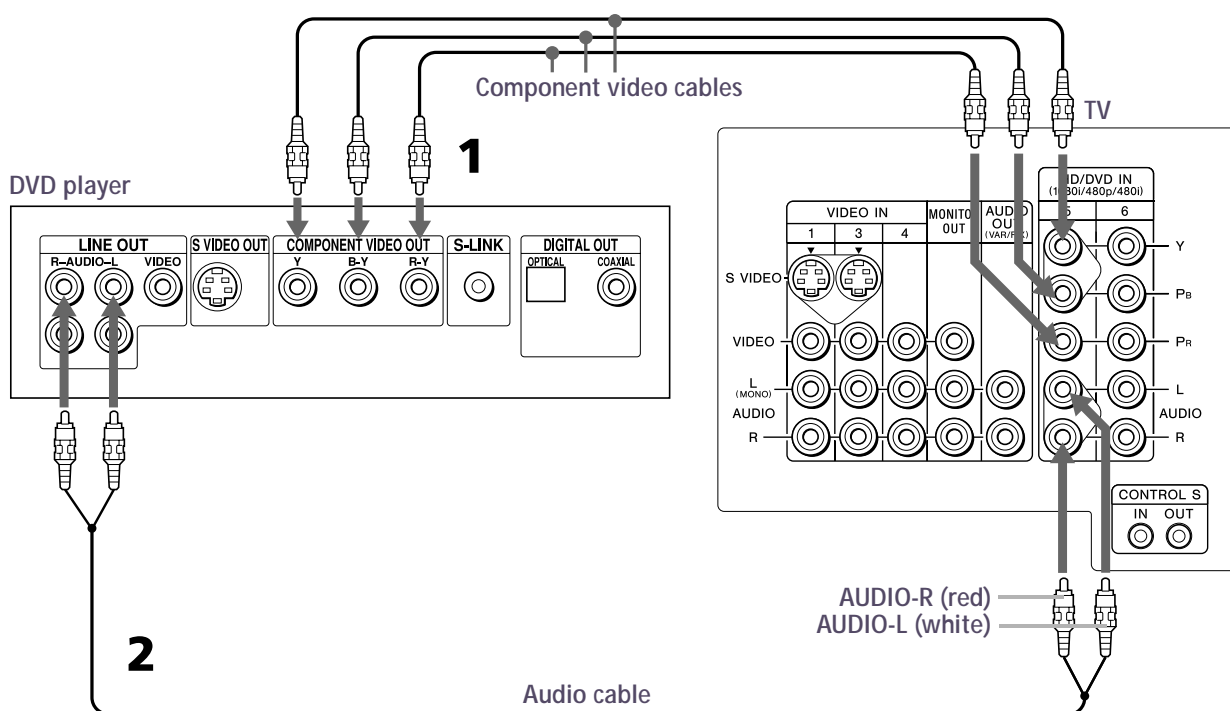
## Connecting a DVD Player with Component Video Connectors


This is the preferred hookup to use if your DVD player has component (Y, PB, PR) jacks.

- 1 Using three separate component video cables, connect the DVD player's Y, PB and PR jacks to the Y, PB and PR jacks on the TV — the number 5 or 6 connections under HD/DVD IN.

 The Y, PB and PR jacks on your DVD player are sometimes labeled Y, CB and CR, or Y, B-Y and R-Y. If so, connect the cables to like colors.

- 2 Using an audio cable, connect the DVD player's Audio OUT jacks to the TV's Audio IN jacks. Be sure to use the same column of inputs that you used for the video connection (HD/DVD IN 5 or 6).




 You cannot use the MONITOR OUT jacks to record the signal from any equipment connected into the Y, PB, PR jacks.

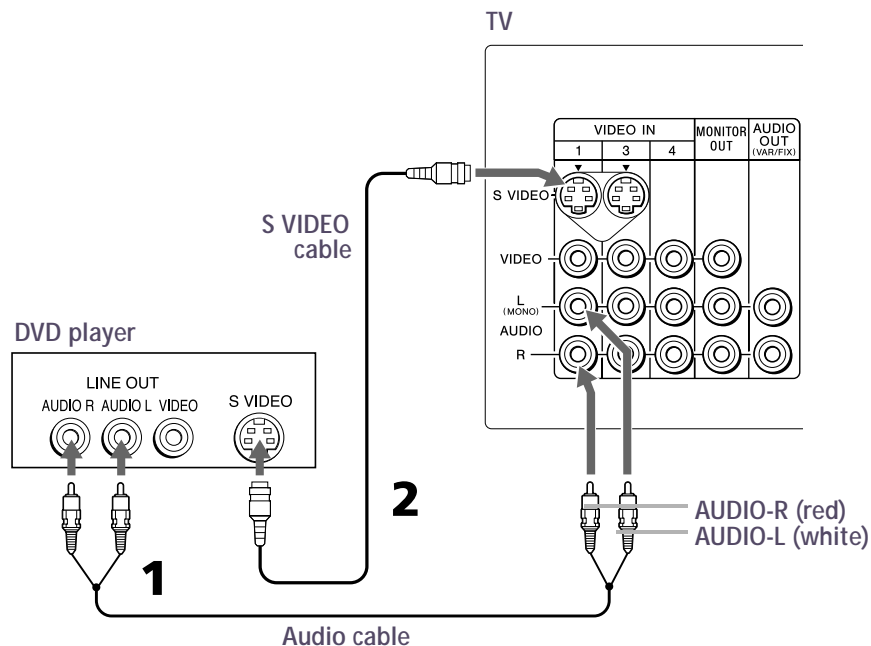


## Connecting a DVD Player with A/V Connectors

Use this hookup if your DVD player does not have component (Y, PB, PR) jacks.

 An S VIDEO connection will give a good-quality video signal, but if your DVD player has component video, that connection (described on the previous page) will give an even better signal.


- 1 Using audio cables, connect the DVD player's Audio OUT jacks to the TV's Audio IN jacks.
- 2 Using an S VIDEO cable, connect the DVD player's S VIDEO jack to the TV's S VIDEO jack.




To switch between your TV and DVD

- ☐ Use the TV/VIDEO button on the TV's remote control to switch from one input device to another.

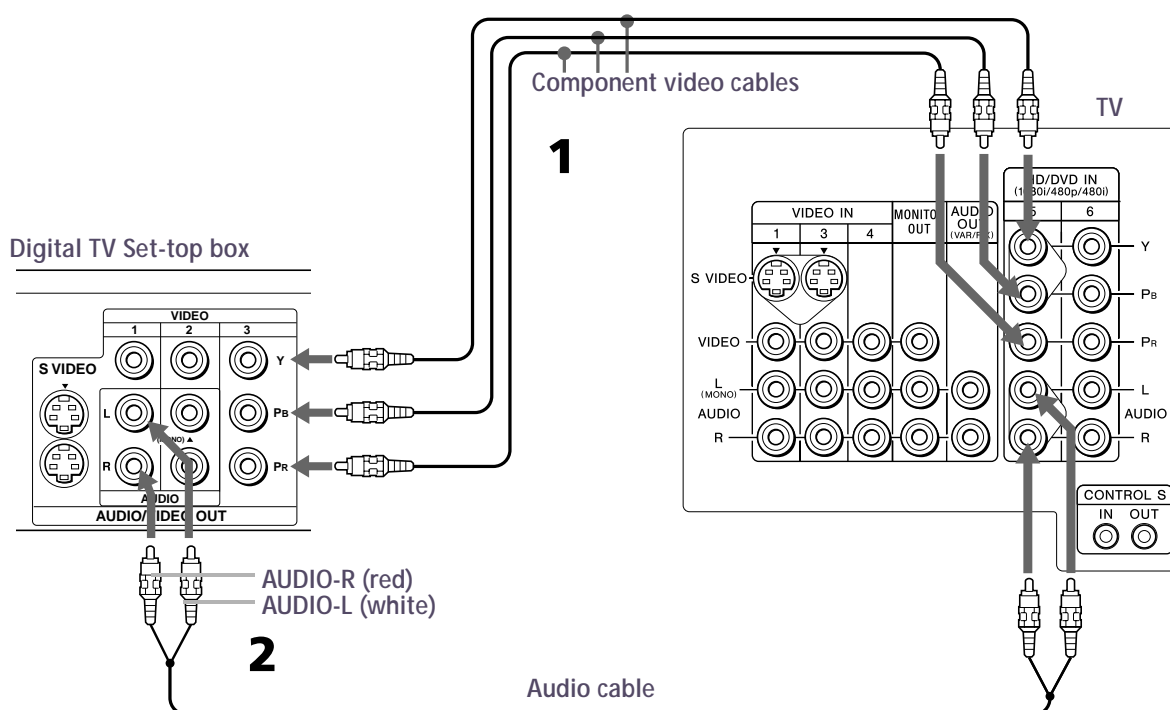
## Connecting a Digital TV Receiver

 Be sure to read the manual for the Set-top box.

- 1 Using three separate component video cables, connect the Digital TV Set-top box's Y, P<sub>B</sub> and P<sub>R</sub> jacks to the TV.

 If you prefer, you can use an S VIDEO cable instead of the Y, P<sub>B</sub> and P<sub>R</sub> connections. The Y, P<sub>B</sub> and P<sub>R</sub> connections will provide the best-quality picture, but you cannot record the signal from any equipment connected to the Y, P<sub>B</sub> and P<sub>R</sub> inputs.

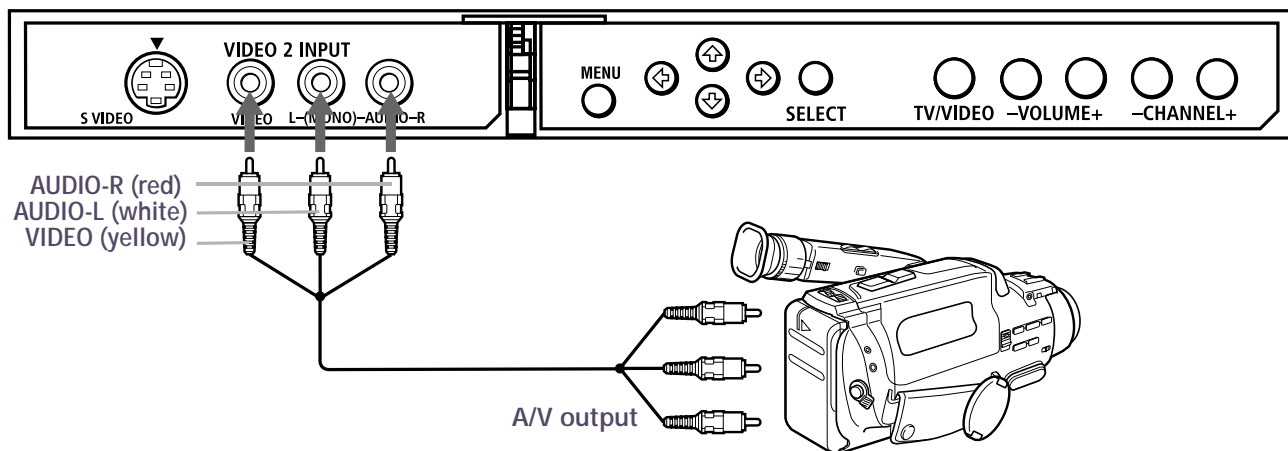
- 2 Using an audio cable, connect the Digital TV Set-top box's Audio OUT jacks to the TV's Audio IN jacks.



## Connecting a Camcorder


For easy connection of the camcorder, the TV has front Audio and Video inputs (shown below). If you prefer, you can connect the camcorder to the TV's rear Audio and Video IN jacks.

- 1 Using A/V cables, connect the camcorder's Audio and Video OUT jacks to the TV's Audio and Video IN jacks.



(Illustrations in this manual are based upon the KV-32/36XBR450; the front panel of the KV-40XBR700 is functionally the same, but has slight cosmetic differences.)

If you have a mono camcorder, connect its audio output to the TV's AUDIO L jack.

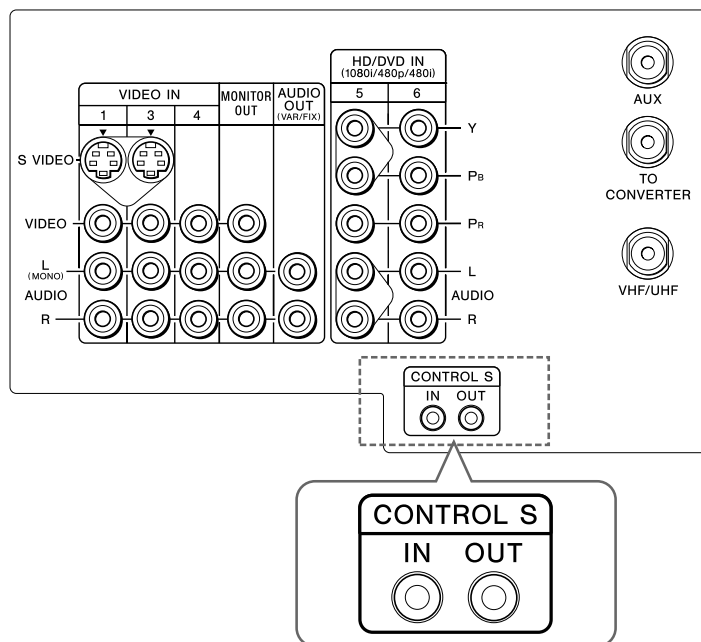
 If the camcorder you are connecting has an S VIDEO jack, you can use an S VIDEO cable for improved picture quality (compared to a combination audio/video cable). Because S VIDEO cables carry only the video signal, you will also need audio cables for sound.

To view the camera's output

- ❑ Use the TV/VIDEO button on the front panel of the TV (or on the remote control) to set the TV to the video input to which the camcorder is connected. (VIDEO 2 in the illustration above.)

## Using the CONTROL S Feature

The CONTROL S feature allows you to control your TV, plus other Sony equipment (such as a DVD player or VCR) connected to the TV, using only the TV's remote control. In addition to allowing you to control multiple devices with one remote control, the CONTROL S feature allows you to always point your remote control at your TV, instead of having to point it at the other equipment, which might be hidden or out of direct line of sight.



## Setting Up the TV Automatically

After you finish connecting your TV, you can run Auto Setup to set up your channels. The Auto Setup screen appears when you turn your TV on for the first time after installing it. If you do not want to set up the channels at this time, you can do it later by using the Auto Program feature in the Channel menu (see page 40 for information regarding Channel menu).



The Auto Setup feature does not apply for installations that use a cable box for all channel selection.

---

### Using Auto Setup

- 1 Turn on the TV.
- 2 Press the TV FUNCTION button on the remote control.
- 3 Press CH+ to run Auto Setup.
- 4 After Auto Setup has run, press CH- to exit.

#### Reset TV to Factory Settings

To reset your TV to the factory settings

- 1 Turn on the TV.
- 2 Hold down the RESET button on the remote control.
- 3 Press and release the POWER button on the TV. (The TV will turn itself off, then back on.)
- 4 Release the RESET button.

# Using the Features

## Overview

This chapter describes how to use features of your TV.

<i>Topic</i>	<i>Page</i>
Using Favorite Channels	30
Using Twin View	31
Using the Freeze Function	34



## Using Favorite Channels

The Favorite Channel feature lets you select programs from a list of favorite channels that you previously specified.

To display a list of your favorite channels:

- 1 If you have not already done so, create a list of favorite channels. (For information on setting up Favorite Channels see “Selecting Channel Options” on page 40.)
- 2 Press the FAVORITES button on the remote control.



- 3 Move the joystick  $\blacktriangle$  or  $\blacktriangledown$  to highlight the channel you want to watch. The program on that channel appears in the preview window.
- 4 Press the  $\oplus$  button to select the channel.


## Using Twin View

Twin View lets you see two pictures — from an antenna, a VCR, a DVD, etc. — on the screen at the same time. (You can only hear the sound associated with one of the pictures however. You choose which picture's sound is selected.) You can change the relative size of each of the pictures.

---



### Displaying Twin Pictures

To display twin pictures

- 1 Press the  button on your remote control. (A second picture-window appears.)




- 2 To cancel twin pictures

- ☐ Press the  button or
- ☐ Press the  button.

## Activating the Picture

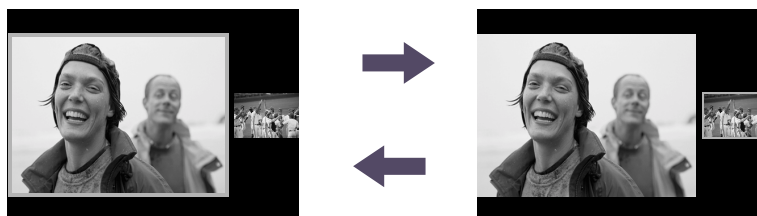
With Twin View, the picture highlighted with a blue frame is active. In the active picture, you can:

- ☐ Change channels
- ☐ Adjust the volume.
- ☐ Switch the input sources (to go from UHF/VHF to CATV cable, for example, press TV/VIDEO on the remote control).
- ☐ Change the picture size by pressing **▲/▼** on the joystick.

 Normally the TV memorizes the last-used sizes; when Twin View is turned off, then back on, the last-used sizes are displayed. If you are using the enhanced 16:9 picture, however, the aspect ratio changes to 4:3 in Twin View, and the picture is reformatted to that ratio.

To activate the right picture

- ☐ Move the joystick to the right (without pressing down on it).



To activate the left picture

- ☐ Move the joystick to the left (without pressing down on it).

Factors affecting Twin View include:

- ☐ Equipment connected to the AUX and HD/DVD IN (numbers 5 and 6) inputs cannot be displayed in the right Twin View picture.

---

## Changing the Picture Size

The zoom feature lets you vary the relative size of the left and right pictures.

- 1 Activate the picture whose size you want to change.
- 2 Press **▲** on the joystick to enlarge the picture.
- 3 Press **▼** on the joystick to make the picture smaller.



When you adjust the twin screen sizes, the TV memorizes the change. The next time you use the Twin View function, the memorized sizes appear.

## Using the Freeze Function

The FREEZE button allows you to temporarily capture a program's picture. You can use this feature to write down information such as phone numbers, recipes, etc.

The FREEZE feature works only in normal view; if you are in Twin View, it will not work.

To use the FREEZE function

- 1 When the program information you want to capture is displayed, press the FREEZE button, on the remote control.
- 2 The TV switches to Twin View mode and displays the “frozen” picture on the right, while the current program continues on the left.




- 3 To cancel and return to normal viewing, press the FREEZE button.







# Using the Menus

## Overview


Opening and choosing a menu:

- 1 Press the MENU button to display the Menu screen.
- 2 Move the joystick to the desired menu icon and press  to select it.
- 3 Use the joystick to scroll through the features.
- 4 See the specific menu page for instructions on moving through the menu.

The Menu gives you access to the following features:

<i>Menu Icon</i>	<i>Description</i>	<i>Page</i>
	VIDEO allows you to make adjustments to your picture settings. It also allows you to customize the Picture Mode based on the type of program you are viewing.	36
	AUDIO offers enhanced audio options such as listening to second audio programming (SAP), or customizing the effect of the sound on your TV.	38
	CHANNEL allows you to set up a Favorite Channel list, run the Auto Program function, and more.	40
	PARENT lets you control the viewing of programs based on their ratings.	42
	TIMER lets you set the clock on your TV and allows you to program your TV for scheduled viewing using the Timers.	46
	SETUP provides several options for setting up your channels, labeling your video inputs, and selecting the language of the on-screen menus.	47

To end a menu session:  
Press MENU button again.





To end one menu session  
and move to another:  
Move the joystick upward  
to return to the menu  
icons.  
Move the joystick to  
choose the next menu icon  
and press  to select it.






## Using the Video Menu

To select the Video Menu


- 1 Press MENU.
- 2 Move the joystick to the Video icon  and press .
- 3 Use the joystick to scroll through the features.
- 4 Press  to select a feature. That feature's adjustment appears.
- 5 Use the joystick to make the desired adjustments.
- 6 Press  to select the desired adjustment.
- 7 Press MENU to exit the menu screen.




To restore the factory default settings for Picture, Brightness, Color, Hue, and Sharpness, Color Temp and VM.

-  Press RESET on the remote control when in the Video menu.

### Selecting Video Options

 To change from one Video Mode to another, use the PICTURE MODE button on the remote control.

The Video Menu includes the following options.


Option	Description	
<b>Mode</b> <i>Customized picture viewing</i>	Vivid	Select for enhanced picture contrast and sharpness.
	Standard	Recommended for normal viewing conditions.
	Movie	Select for soft, film like, picture.
	Pro	Select for professional monitor like appearance.
 You can alter the Video Menu settings (Picture, Brightness, Color, etc.) for each Mode.		
Picture	Adjust to increase picture contrast and deepen the color or decrease picture contrast and soften the color.	
Brightness	Adjust to brighten or darken the picture.	
Color	Adjust to increase or decrease color intensity.	
Hue	Adjust to increase or decrease the green tones.	
Sharpness	Adjust to sharpen or soften the picture.	

<i>Option</i>	<i>Description</i>
Color Temp	Choose from three color temperatures:
<i>White intensity adjustment</i>	Cool      Select to give the white colors a blue tint.
	Neutral      Select to give the white colors a neutral tint.
	Warm      Select to give the white colors a red tint (NTSC-Standard).
VM <i>Velocity Modulation</i>	Sharpens picture definition to give every object a sharp, clean edge. Select from High, Medium, Low, Off.
DRC mode <i>Digital Reality Creation mode</i>	Creates a high-resolution picture with 4x density, for high quality sources (i.e., DVD player, Satellite receiver). Select from Interlaced, Progressive, or CineMotion.
	Interlaced      Recommended for moving pictures.
	Progressive      Recommended for still images and text.
	CineMotion      Provides an optimized display by automatically detecting film content and applying a reverse 3/2 pulldown process. Moving pictures will appear clearer and more natural-looking.



# Using the Audio Menu

To select the Audio Menu

- 1 Press MENU.
- 2 Move the joystick to the Audio icon  and press  $\odot$ .
- 3 Use the joystick to scroll through the options.
- 4 Press  $\odot$  to select an option. That option's settings appear.
- 5 Use the joystick to make the desired adjustments.
- 6 Press  $\odot$  to select the desired adjustment.
- 7 Press MENU to exit the menu screen.



To restore the factory default settings for Treble, Bass, and Balance

- ☐ Press RESET on the remote control when in the Audio menu.

## Selecting Audio Options

The Audio Menu includes the following options:





Option	Description	
Treble	Adjust to increase or decrease higher-pitched sounds.	
Bass	Adjust to increase or decrease lower-pitched sounds.	
Balance	Adjust to emphasize left or right speaker balance.	
Steady Sound	ON	Select to stabilize the volume.
	OFF	Select to turn off Steady Sound.
Effect	TruSurround	Select for surround sound (for stereo programs only).
	Simulated	Adds a surround-like effect to mono programs.
	OFF	Normal stereo or mono reception.

<i>Option</i>	<i>Description</i>	
<b>MTS</b> <i>Enjoy stereo, bilingual and mono programs</i>	Stereo	Select for stereo reception when viewing a program broadcast in stereo.
	Auto-SAP	Select to automatically switch the TV to second audio programs when a signal is received. (If no SAP signal is present, the TV remains in Stereo mode.)
	Mono	Select for mono reception. (Use to reduce noise during weak stereo broadcasts.)
<b>Speaker</b>	ON	Select to turn on the TV speakers.
	OFF	Select to turn off the TV speakers and listen to the TV's sound only through your external audio system speakers.
<b>Audio Out</b> <i>Easy control of volume adjustments</i>	This option can be set only when the Speaker option is set to OFF.	
	Variable	Sound output varies according to the TV settings. Useful when you want to use the TV's remote control to adjust the output through a separate audio system.
	Fixed	Sound output is held at a fixed level. Use your audio receiver's remote control to adjust the volume.



## Using the Channel Menu




To select the Channel Menu



- 1 Press MENU.
- 2 Move the joystick to the Channel icon  and press .
- 3 Use the joystick to scroll through the features.
- 4 Press  to select a feature. That feature's options appear.
- 5 Use the joystick to scroll through the options.
- 6 Press  to select the desired option.
- 7 Press MENU to exit the menu screen.



### Selecting Channel Options

The Channel Menu includes the following options:

Option	Description	
Favorite Channel	1	Press  to select a favorite channel number.
	2	Use the joystick to scroll through the channels until you find the channel you want to add to your favorites.
	3	Press  to select it.
Cable	ON	Select if you are receiving cable channels with a CATV cable.
	OFF	Select if you are using an antenna.
 You should run Auto Program after changing the cable setting.		
Channel Fix <i>Useful when you have a cable box or satellite receiver connected</i>	2-6	“Fix” your TV’s channel setting to 3 or 4 and use the cable box, VCR or satellite receiver to change channels. Select one of these settings if you have connected the device to the VHF/UHF jack.
	AUX 2-6	Same as 2-6, except you select one of these settings if you have connected the device to the AUX jack (see page 8).
	VIDEO 1	Use this setting if you have connected the device to the Audio and Video IN jacks.
Auto Program	Automatically programs the TV for all receivable channels from both VHF/UHF and AUX inputs.	

<i>Option</i>	<i>Description</i>
Channel Skip/Add	<p>Removes and adds viewable channels.</p> <ol style="list-style-type: none"><li>1 Use the joystick to scroll through the channels until you find the channel you want to skip/add.</li><li>2 Press  to select it.</li><li>3 Press the joystick (▲/▼) to toggle between “Add” and “Skip.”</li><li>4 Press  to select.</li></ol>
Channel Label	Label up to 20 channels with their station call letters.









## Using the Parent Menu

The Parent menu allows you to set up the TV to block programs according to their content and rating levels. These ratings are assigned by a federal rating board. Not all programs are rated. Using the Parental Lock blocks programs with a specific rating, but it does not block an entire channel.


To select the Parent Menu


- 1 Press MENU.
- 2 Move the joystick to the Parent icon  and press .
- 3 Use the 0-9 buttons on the remote control to enter your four-digit password.
- 4 Confirm your password by entering it again. (The Parent menu options appear.)
- 5 Use the joystick to scroll through the settings.
- 6 Press  to select the desired option.
- 7 Press MENU to exit the menu screen.



 You need your password for any future access into the Parent menu. If you lose your password, see "Lost password" on page 56.

## Using the Parent Menu

 If you are not familiar with the Parental Guideline rating system, you should select Child, Youth, or Young Adult to help simplify the rating selection. To set more restrictive ratings, select Custom.

 For descriptions of Child, Youth, and Young Adult ratings, see page 44.

The Parent menu includes the following options.

<i>Option</i>	<i>Description</i>	
Parental Lock	OFF	Parental lock is off. No programs are blocked from viewing.
<i>Turn ratings on/off and select a rating system</i>	Child	Maximum ratings permitted are: <input type="checkbox"/> US: TV-Y, TV-G, G <input type="checkbox"/> Canada: TV-Y, C, G
	Youth	Maximum ratings permitted are: <input type="checkbox"/> US: TV-PG, PG <input type="checkbox"/> Canada: TV-PG, PG, 8 ans+
	Young Adult	Maximum ratings permitted are: <input type="checkbox"/> US: TV-14, PG-13 <input type="checkbox"/> Canada: TV-14, 14+, 13 ans+
	Custom	Select to set ratings manually. <input type="checkbox"/> US: See page 44 for details. <input type="checkbox"/> Canada: See page 45 for details.
Change Password	For changing your password.	

## US Models: Selecting Custom Rating Options



The content ratings will increase depending on the level of the age-based rating. For example, a program with a TV-PG V (Violence) rating may contain moderate violence, while a TV-14 V (Violence) rating may contain more intense violence.



To ensure maximum blocking capability, the age-based ratings should be blocked.



If you block unrated TV programs, be aware that the following types of programs may be blocked: emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.

For US models, the Custom Rating Menu includes the following options. (For Canadian models, see page 45.)

Option	Description	
Movie Rating	G	All children and General Audience.
	PG	Parental Guidance suggested.
	PG-13	Parental Guidance for children under 13.
	R	Restricted viewing, parental guidance is suggested for children under 17.
	NC-17 and X	No one 17 and under allowed.
TV Rating	Age-Based Options	
<b>Block programs by their rating, content or both</b>	TV-Y	All children.
	TV-Y7	Directed to older children.
	TV-G	General Audience.
	TV-PG	Parental Guidance suggested.
	TV-14	Parents Strongly cautioned.
	TV-MA	Mature Audience only.
	Content-Based Options	
	FV	Fantasy Violence.
	D	Suggestive Dialogue.
	L	Strong Language.
	S	Sexual situations.
	V	Violence.
Unrated	Block	Blocks all programs and movies that are broadcast without a rating.
<b>Block programs or movies that are broadcast without a rating</b>	Allow	Allows programs and movies that are broadcast without a rating.

### Canadian Models: Selecting Custom Rating Options

For Canadian models, the Custom Rating Menu includes the following options. (For US models, see page 44.)

<i>Option</i>	<i>Description</i>	
English Rating	C	All children.
	C8+	Children 8 years and older.
	G	General programming.
	PG	Parental Guidance.
	14+	Viewers 14 and older.
	18+	Adult programming.
French Rating	G	General programming.
	8 ans+	Not recommended for young children.
	13 ans+	Not recommended for ages under 13.
	16 ans+	Not recommended for ages under 16.
	18 ans+	Programming restricted to adults.
USA Rating	See “US Models” on page 44 for details.	

### Viewing Blocked Programs

You can view a blocked program by entering the password. Press the ENTER button when tuned to a blocked program, and then enter the password. This temporarily switches off the Parental Lock. To reactivate the Parental Lock settings, turn off the TV. When the TV is turned on again, your Parental Controls settings are reactivated.





# Using the Timer Menu

To select the Timer menu

- 1 Press MENU.
- 2 Use the joystick to move to the Timer icon  and press .



To set the Current Time

- 1 Use the joystick to select “Current Time”, then press .
- 2 If it is currently Daylight Savings Time, be sure to set that mode to “ON”. (Daylight Savings Time starts in the Spring and ends in the Fall.)
- 3 Use the joystick to enter the correct time, then press .
- 4 Press MENU to exit the menu screen.



To set the Timer

Before setting the timer, be sure to set your TV’s clock to the current time (and, if appropriate, Daylight Savings Mode). To check the TV’s time setting, press the DISPLAY button on the remote control.

- 1 Move the joystick to “Timer 1” or “Timer 2”, then press .
- 2 Use the joystick to enter your date, time and channel preferences, then press  to select each one.
- 3 Press MENU to exit the menu screen.

To reset the Clock or Timers

- ☐ Press RESET on the remote control after selecting that option in the Timer menu. This resets to the factory defaults.

## Selecting Timer Options


The Timer Menu includes the following options:

Option	Description	
Timer 1 Timer 2	Program	Select to set the Timer by day, time, duration, and channel.
	OFF	Select to turn off the Timer. (Your previous settings will be saved.)
Current Time	Set the current time.	
Daylight Savings	ON	Select in the spring to turn on this mode during Daylight Saving Time.
	OFF	Select in the fall to turn of this mode at the end of Daylight Saving Time.



## Using the Setup Menu

To select the Setup Menu

- 1 Press MENU.
- 2 Use the joystick to move to the Setup icon  and press  $\oplus$ .
- 3 Use the joystick to scroll through the features.
- 4 Press  $\oplus$  to select a feature. (That feature's options appear.)
- 5 Use the joystick to scroll through the options.
- 6 Press  $\oplus$  to select the desired option.
- 7 Press MENU to exit the menu screen.







### Selecting Setup Options

The Setup Menu includes the following options:

Option	Description
Caption Vision	Allows you to select from three closed-caption modes (for programs that are broadcast with closed caption).
CC1, CC2, CC3, CC4	Displays a printed version of the dialog or sound effects of a program. (Should be set to CC1 for most programs.)
TEXT1, TEXT2, TEXT3, TEXT4	Displays network/station information presented using either half or the whole screen (if available). For closed captioning, set to CC1.
XDS (Extended Data Service)	Displays a network name, program name, program length, and time of the show (if the broadcaster offers this service).
OFF	Turns off Caption Vision.



<i>Option</i>	<i>Description</i>
Video Label	Allows you to label the audio/video equipment you connected to the TV, so you can identify it when using the TV/VIDEO button. When in the Setup menu's Video Label feature, use the joystick to highlight an input to label, then press  to select it. Use the joystick to scroll through the labels. Press  to select the equipment you connected to each of the input jacks on the back of your TV. Select "Skip" if you do not have any equipment connected to a particular set of input jacks.
	VIDEO 1/2/3/4      VHS, 8mm, Beta, LD, Game, SAT, DVD, Web, Receiver, DTV, Skip
	VIDEO 5/6      HD, DVD, DTV, Skip
	 If you select "Skip", your TV skips this connection when you press the TV/VIDEO button.
Tilt Correction	Allows you to correct any tilt of the picture.
Language	Select to display all on-screen menus in your language of choice.
16:9 Enhanced	Provides enhanced picture resolution for widescreen sources, such as selected DVD titles (only available when the TV is in VIDEO mode). Press TV/VIDEO and select from one of the following options:
	AUTO      To activate automatically when a 16:9 signal is received.
	ON      To activate manually.
Demo	Runs a demonstration of on-screen menus.

 To use this feature with widescreen DVDs, set your DVD player to 16:9 aspect ratio.



AUTO/ON will appear when TV is in video mode 1-6.  
ON/OFF will appear when TV is in VIDEO mode 5-6 and the 480p signal occurs.

# Other Information

## Overview

This chapter includes the following topics:

<i>Topic</i>	<i>Page</i>
Programming the Remote Control	50
Operating Other Equipment with Your TV Remote Control	53
Troubleshooting	55
Specifications	57
Index	59

## Programming the Remote Control

The remote control is preset to operate Sony brand video equipment.

<i>Sony Equipment</i>	<i>Switch Position on Remote Control</i>	<i>Programmable Code Number</i>
Beta, ED Beta VCRs	AV1	303
8 mm VCR	AV2	302
VHS VCR	AV3	301
DVD Player	DVD	751

If you have video equipment other than Sony brand that you want to control with the TV's remote control, use the following procedures to program the remote control.



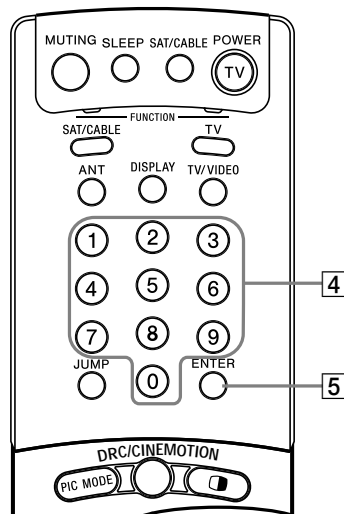
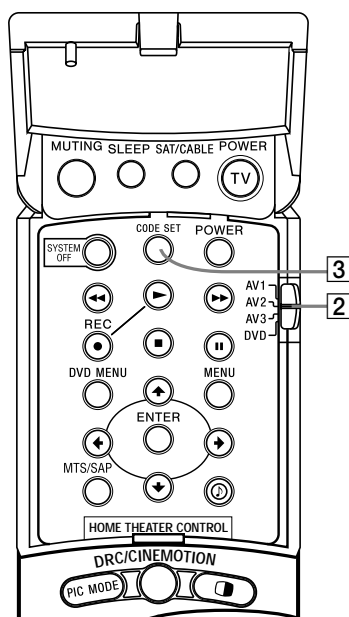
The equipment must have infrared (IR) remote capability in order to be used with the remote control.

- 1 Check the list of the "Manufacturer's Codes" listed on page 52, and find the three-digit code number for the manufacturer's code for your equipment. (If more than one code number is listed, start with the number listed first.)
- 2 Open the cover of the remote control and move the slide switch to the desired equipment type.
- 3 Press CODE SET and close the cover of the remote control.



You must do step 4 within 10 seconds of step 3, or you must redo steps 2 and 3.

- 4 Enter the three-digit manufacturer's code number.
- 5 Press ENTER.
- 6 To check if the code number works, aim the TV's remote control at the equipment and press the green POWER button that corresponds with that equipment. If it responds, you are done. If not, try using another code listed for that manufacturer.



**Tips**

- ❑ If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- ❑ If you enter a new code number, the code number you previously entered at that setting is erased.
- ❑ In some cases, you may not be able to operate your equipment with the Sony remote control. In such cases, use the equipment's own remote control unit.
- ❑ Whenever you remove the batteries to replace them, the code numbers may revert to the factory setting and must be reset.

## Manufacturer's Codes

## VCRs

<i>Manufacturer</i>	<i>Code</i>
Sony	301, 302, 303
Admiral (M. Ward)	327
Aiwa	338, 344
Audio	314, 337
Dynamic	
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	302, 332
Criterion	315
Curtis Mathes	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General	329, 304, 309
Electric	
Go Video	322, 339, 340
Goldstar	332
Hitachi	306, 304, 305, 338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/ MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327

<i>Manufacturer</i>	<i>Code</i>
Orion	317
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/ PROSCAN	304, 305, 308, 309, 311, 312, 313, 310, 329
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Shintom	315
Signature 2000 (M. Ward)	338, 327
SV2000	338
Sylvania	308, 309, 338, 310
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	314, 330, 336, 337
Zenith	331

## Laserdisc Players

<i>Manufacturer</i>	<i>Code</i>
Sony	701
Panasonic	704, 710
Pioneer	702

## DVD Players

<i>Manufacturer</i>	<i>Code</i>
Sony	751
GE	755
Hitachi	758
JVC	756
Magnavox	757
Mitsubishi	761
Oritron	759
Panasonic	753
Philips	757
Pioneer	752
RCA/ PROSCAN	755
Samsung	758
Toshiba	754
Zenith	760

## Cable Boxes

<i>Manufacturer</i>	<i>Code</i>
Sony	230
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

## Satellite Receivers

<i>Manufacturer</i>	<i>Code</i>
Sony	801
Dish Network	810
Echostar	810
General	802
Electric	
Hitachi	805
Hughes	804
Mitsubishi	809
Panasonic	803
RCA/ PROSCAN	802, 808
Toshiba	806, 807

## Operating Other Equipment with Your TV Remote Control

### Operating a VCR

Open the cover of the remote control and move the slide switch to the AV input you coded for the VCR.

<i>To Do This ...</i>	<i>Press</i>
Turn on/off	green POWER button (under the cover)
Change channels	CH +/-
Record	▶ and REC simultaneously.
Play	▶
Stop	■
Fast forward	▶▶
Rewind the tape	◀◀
Pause	
Search the picture forward or backward	▶▶ or ◀◀ during playback (release to resume normal playback)

### Operating a DVD Player

Open the cover of the remote control and move the slide switch to the AV input you coded for the DVD player.


<i>To Do This ...</i>	<i>Press</i>
Turn on/off	green POWER button (under the cover)
Play	▶
Stop	■
Pause	
Step through different tracks of an audio disc	▶▶ to step forward or ◀◀ to step backward
Step through different chapters of a video disc	CH+ to step forward or CH- to step backward
Display the DVD menu	DVD MENU
Display the menu (Setup)	MENU



## Operating a Cable Box






<i>To Do This ...</i>	<i>Press</i>
Turn on/off	SAT/CABLE (green POWER button)
Select cable box	SAT/CABLE (FUNCTION button)
Select a channel	0-9 buttons, ENTER
Change channels	CH +/-
Back to previous channel	JUMP

## Operating a Satellite Receiver

<i>To Do This ...</i>	<i>Press</i>
Turn on/off	SAT/CABLE (green POWER button)
Select satellite receiver	SAT/CABLE (FUNCTION button)
Select a channel	0-9 buttons, ENTER
Change channels	CH +/-
Back to previous channel	JUMP
Display channel number	DISPLAY
Display SAT guide	GUIDE
Display SAT menu	MENU
Move highlight (cursor)	Joystick
Select item	 button

## Operating an MDP (Laserdisc Player)

Open the cover of the remote control and move the slide switch to the AV input you coded for the MDP.

<i>To Do This ...</i>	<i>Press</i>
Turn on/off	green POWER button (under the cover)
Play	
Stop	
Pause	
Search the picture forward or backward	 or  during playback (release to resume normal playback)
Search a chapter forward or backward	CH +/-

## Troubleshooting

<i>Problem</i>	<i>Possible Remedies</i>
No picture (screen not lit), no sound	<ul style="list-style-type: none"> <li><input type="checkbox"/> If your TV does not turn on, and a red light keeps flashing, your TV may need service. Call your local Sony Service Center.</li> <li><input type="checkbox"/> Make sure the power cord is plugged in.</li> <li><input type="checkbox"/> Push the power button on the front of the TV.</li> <li><input type="checkbox"/> Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV; when watching connected equipment, set to VIDEO 1, 2, 3, 4, 5 or 6, as appropriate.</li> <li><input type="checkbox"/> Try another channel; it could be station trouble.</li> </ul>
Remote control does not operate	<ul style="list-style-type: none"> <li><input type="checkbox"/> Batteries could be weak. Check the batteries and replace as necessary.</li> <li><input type="checkbox"/> Press TV (FUNCTION) when operating your TV.</li> <li><input type="checkbox"/> Make sure the TV's power cord is connected securely to the wall outlet.</li> <li><input type="checkbox"/> Locate the TV at least 3-4 feet away from fluorescent lights.</li> <li><input type="checkbox"/> Check the orientation of the batteries.</li> </ul>
Dark, poor or no picture (screen lit), good sound	<ul style="list-style-type: none"> <li><input type="checkbox"/> Adjust the Picture setting in the Video menu (see page 36).</li> <li><input type="checkbox"/> Adjust the Brightness setting in the Video menu (see page 36).</li> <li><input type="checkbox"/> Check antenna/cable connections.</li> </ul>
Good picture, no sound	<ul style="list-style-type: none"> <li><input type="checkbox"/> Press MUTE so that "MUTE" disappears from the screen (see page 4).</li> <li><input type="checkbox"/> Make sure Speaker is set to ON in the Audio menu (see page 38).</li> </ul>
Cannot receive upper channels (UHF) when using an antenna	<ul style="list-style-type: none"> <li><input type="checkbox"/> Change Cable to OFF (see page 40).</li> <li><input type="checkbox"/> Use Auto Program in the Channel menu to add receivable channels that are not presently in memory (see page 40).</li> </ul>
No color	<ul style="list-style-type: none"> <li><input type="checkbox"/> Adjust the Color settings in the Video menu (see page 36).</li> </ul>
Only snow and noise appear on the screen	<ul style="list-style-type: none"> <li><input type="checkbox"/> Check the antenna/cable connections.</li> <li><input type="checkbox"/> Try another channel (it could be station trouble).</li> <li><input type="checkbox"/> Press ANT to change the input mode (see page 40).</li> </ul>
Dotted lines or stripes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Adjust the antenna.</li> <li><input type="checkbox"/> Move the TV away from noise sources such as cars, neon signs, or hair-dryers.</li> </ul>
TV is fixed to one channel	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use Auto Program in the Channel menu to add receivable channels that are not presently in the TV's memory (see page 40).</li> <li><input type="checkbox"/> Check your Channel Fix settings (see page 40).</li> </ul>
Double images or ghosts	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use a highly directional outdoor antenna or a cable (if the problem is caused by reflections from nearby mountains or tall buildings).</li> </ul>
Cannot operate menu	<ul style="list-style-type: none"> <li><input type="checkbox"/> If the item you want to choose appears in gray, you cannot select it.</li> </ul>
Cannot receive any channels when using cable TV	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use Auto Program in the Channel menu to add receivable channels that are not presently in the TV's memory (see page 40).</li> <li><input type="checkbox"/> Check your cable settings.</li> <li><input type="checkbox"/> Make sure Cable is set to ON in the Channel menu (see page 40).</li> </ul>

<i>Problem</i>	<i>Possible Remedies</i>
Cannot gain enough volume when using a cable box	<input type="checkbox"/> Increase the volume of the cable box using the cable box's remote control. Then press TV (FUNCTION) and adjust the TV's volume.
Cannot receive channels	<input type="checkbox"/> Use Auto Program in the Channel menu to add receivable TV channels that are not presently in TV memory (see page 40).
Unable to select a channel	<input type="checkbox"/> Use Auto Program in the Channel menu to add receivable TV channels that are not presently in TV memory (see page 40).
Lost password	<input type="checkbox"/> In the password screen (see page 42), enter the following master password: 4357. The master password clears your previous password; it cannot be used to temporarily unblock channels.
Cannot change channels with the remote control	<input type="checkbox"/> Be sure you have not inadvertently switched your TV from channel 3 or 4 setting if you are using another device to change channels. <input type="checkbox"/> If you are using another device to control channels, be sure the "function" button for that device has been pressed.
Cannot cycle through the other video equipment connected to the TV	<input type="checkbox"/> Be sure the Video Label feature has not been set to Skip (see page 48).
There is a black box on the screen	<input type="checkbox"/> You have selected a text option in the Setup menu and no text is available. (See page 47 to reset Setup selections.) To turn this feature off, select OFF in the Caption Vision option. If you were trying to get closed captioning, select CC1 instead of Text 1-4.
There is no twin picture or it is just static	<input type="checkbox"/> Be sure your twin picture is set to a video source/channel that has a program airing. <input type="checkbox"/> You may be tuned to a video input with nothing connected to it. Try cycling through your video inputs using the TV/VIDEO button. <input type="checkbox"/> Twin View is not set to receive a signal from the AUX input. If you have connected a VCR or satellite receiver to the AUX input on the TV, it will not show in the right picture.
I get the same program in both Twin View pictures	<input type="checkbox"/> Both may be set to the same channel. Try changing channels in either the left or right picture. <input type="checkbox"/> You may be running all your channels through a cable box. The cable box will only unscramble one signal at a time. If possible, run a direct cable to your TV's VHF/UHF input. (This will only work if your cable system provides an unscrambled signal.)
I cannot get anything but TV channels in my left or right Twin View picture	<input type="checkbox"/> Be sure the video label has not been set to skip your video inputs. See the Setup menu on pages 47 and 48.

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Customer Information Services Center at 1-800-222-SONY (7669) (U.S. residents only) or 1-877-899-7669 (Canadian residents only).

## Specifications

### All Models (General)

Picture Tube	FD Trinitron® tube	
Antenna	75 ohm external terminal for VHF/UHF	
Television System	NTSC, American TV Standard	
Channel Coverage		
VHF	2-13	
UHF	14-69	
CATV	1-125	
Power Requirements	120V, 60 Hz	
Number of Inputs/Outputs		
Video (IN)	4	1 Vp-p, 75 ohms unbalanced, sync negative
S Video (IN)	3	Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75 ohms
Audio (IN)	6	500 mVrms (100% modulation) Impedance: 47 kilohm
Audio (OUT)	1	More than 408 mVrms at the maximum volume setting (Variable) More than 408 mVrms (Fixed) Impedance (output): 2 kilohms
Monitor Out	1	1 Vp-p, 75 ohms unbalanced, sync negative
CONTROL S (IN/OUT)	1	
Component Video Input	2 (Y, P <sub>B</sub> , P <sub>R</sub> )	Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative; P <sub>B</sub> : 0.7 Vp-p, 75 ohms P <sub>R</sub> : 0.7 Vp-p, 75 ohms

### KV-32XBR450

Supplied Accessories	
Remote Control	RM-Y184
AA (R6) Batteries	2 supplied for remote control
Optional Accessories	
AV Cable	VMC-810/820/830 HG
Audio Cable	RKC-515HG
S-LINK Cable	RK-G69HG
Component Video Cable	VMC-10/30 HG
TV Stand	SU-32XBR45 (also SU-32HS2 in Canada)
Visible Screen Size	32 in (812.8 mm) picture measured diagonally
Actual CRT Size	34 in (863.4 mm) picture measured diagonally
Speaker Output	15W x 2
Dimensions (W x H x D)	898.0 x 678.0 x 579.5 mm (35 3/8 x 26 3/4 x 22 7/8 in)
Mass	84 kg (185 lbs)
Power Consumption	
In Use	245 W
In Standby	2 W

## Other Information

### KV-36XBR450

Supplied Accessories	
Remote Control	RM-Y184
AA (R6) Batteries	2 supplied for remote control
Optional Accessories	
AV Cable	VMC-810/820/830 HG
Audio Cable	RKC-515HG
S-Link Cable	RK-G69HG
Component Video Cable	VMC-10/30 HG
TV Stand	SU-36XBR45 (also SU-36HS2 in Canada)
Visible Screen Size	36 in (914 mm) picture measured diagonally
Actual CRT Size	38 in (965 mm) picture measured diagonally
Speaker Output	15W x 2
Dimensions (W x H x D)	994 x 755 x 622 mm (39 1/4 x 29 3/4 x 24 1/2 in)
Mass	108 kg (238 lbs)
Power Consumption	
In Use	245 W
In Standby	2 W

### KV-40XBR700

Supplied Accessories	
Remote Control	RM-Y184
AA (R6) Batteries	2 supplied for remote control
Optional Accessories	
AV Cable	VMC-810/820/830 HG
Audio Cable	RKC-515HG
S-Link Cable	RK-G69HG
Component Video Cable	VMC-10/30 HG
TV Stand	SU-40XBR7
Visible Screen Size	40 in (1,016 mm) picture measured diagonally
Actual CRT Size	42 in (1,067 mm) picture measured diagonally
Speaker Output	15W (subwoofer) 7.5W x 2
Dimensions (W x H x D)	1093 x 836 x 665 mm (43 1/8 x 33 X 26 1/8 in)
Mass	138 kg (304 lbs)
Power Consumption	
In Use	245 W
In Standby	2 W

Design and specifications are subject to change without notice.

---

# *Index*

16:9 (widescreen) 2, 48

## **A**

Activating Twin View 31

Adding channels to the channel list 40

Adjusting the audio

Steady sound 38

Adjusting the picture definition 36

ANT button 4

antenna, connecting 10

Aspect ratio, 16:9

in Twin View 32

Audio menu 35, 38

audio receiver, connecting 22

Auto Program (channel setup) 28, 40

Auto setup 28, 40

Auto-SAP 39

## **B**

balance, adjusting 38

bass, adjusting 38

batteries

inserting in remote 3

bilingual audio 39

blocking programs. See ratings.

brightness, adjusting 36

## **C**

cable

box, connecting with VCR 15

connecting 10–13

setting ON/OFF 40

with VCR, connecting 14

cable box, using with TV remote control 54

camcorder, connecting 26

Caption Vision 47

CATV. see cable

Channel list, adding channels 30, 40

Channel menu 35, 40

Channel Setup menu 40

Channel Skip/Add 41

channels

creating labels 41

setting up 28

closed caption modes 47

Code Set button 6

color temperature, adjusting 37

color, adjusting 36

Connecting

Audio receiver 22

Cable box 11–13, 15–16

Cable or antenna 10–13

Camcorder 26

Digital TV receiver 25

DVD player 23, 24

Satellite receiver 19–21

VCR 14–18

VCR with Satellite receiver 20

Contents of package 3

CONTROLS 27

Controls and connectors 8–9

Converter 12

## **D**

Demo, menus 48

Digital Reality Creation 2, 37

Display button 4

Display, turning off 4

DVD player

connecting with component video connectors  
23

using with TV remote control 53

with A/V connectors, connecting 24

## **E**

Enhanced picture resolution, 16:9 48

enlarging picture, a Twin View picture 33

Extended Data Service 47

## **F**

Favorite Channel

setting up 40

using 30



Favorites button 5  
features 2  
Freeze, using 34  
Front Panel controls 8

## G

Guide button 4

## H

Hookups 10–26  
hue, adjusting 36

## I

inputs, labeling 48  
Installation 10–26

## J

Jump button 4

## L

label  
    channels 41  
    video inputs 48  
Languages, setting 48  
Locking programs 42–45

## M

Manufacturer's codes 52  
MDP, using with TV remote control 54  
Menu button 4  
menus  
    Audio 35, 38  
    Channel 35, 40  
    Channel Setup 40  
    Parent 35, 42  
    Parental Control 42  
    Setup 35, 47  
    Timer 35, 46  
    Video 35, 36  
Muting 4

## P

Parent menu 35, 42  
parental control, described 2

password  
    changing 43, 56  
picture contrast, adjusting 36  
picture definition, adjusting 37  
Picture Mode 4, 36  
Picture size, adjusting in Twin View 33  
power cord, removing from holder 7  
presetting channels 40  
problems, troubleshooting 55–56

## R

ratings  
    setting 42–45  
    viewing blocked programs 45  
Rear panel controls and connections 8–9  
remote control  
    inserting batteries 3  
    programming 50–52  
Remote control, buttons 4–6  
Remote control, operating other equipment  
    with  
        Cable box 54  
        DVD 53  
        MDP 54  
        Satellite receiver 54  
        VCR 53  
Reset button 4  
resetting  
    Audio options 38  
    factory settings 28  
    Timer options 46  
    Video options 36

## S

SAT/CABLE Function button 4  
SAT/CABLE Power button 4  
satellite receiver  
    connecting 19, 20  
    using with TV remote control 54  
Setting favorite channel 40  
setting up channels 28  
Setup menu 35, 47  
sharpness, adjusting 36  
SLEEP button 4  
sound effect, adjusting 38

speakers  
    turning on/off 22, 39  
    using external speakers 22, 39  
specifications 57–58  
Steady Sound  
    adjusting 38  
    described 2  
Surround Sound 38

## T

tape-to-tape editing 18  
tilt, correcting 48  
Time  
    set current 46  
    set daylight saving 46  
Timer menu 35, 46  
Timer setting 46  
treble, adjusting 38  
troubleshooting 55–56  
TV Function button 4  
TV Power button 4  
TV/VIDEO button 5  
Twin View  
    activating a picture 32  
    changing the picture size 33  
    displaying a picture 31

## V

VCR  
    connecting two, for tape editing 18  
    using with TV remote control 53  
    with cable box, connecting 15  
    with cable, connecting 14  
    with satellite receiver, connecting 20  
VCR/DVD Power button 6  
Velocity Modulation 2, 37  
video inputs, labeling 48  
Video menu 35, 36  
Video Modes, selecting 36

## W

Wega, described 2  
widescreen 48  
widescreen, described 2

## Z

zoom feature, with Twin View 33








# SERVICE MANUAL

# DX-1A CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KV-40XBR700</b>	RM-Y184	US	SCC-S47G-A
<b>KV-40XBR700</b>	RM-Y184	CND	SCC-S48E-A
 <b>KV-40XBR700H</b>	RM-Y184	HAWAII	SCC-S54D-A

## SUPPLEMENT - 1

SUBJECT: NEW MODEL ADDED. NEW PARTS ADDED  
TO EXPLODED VIEWS.

Correct the service manual as shown.  
File this Correction with the service manual.

 : Modified Item

Section 6: Exploded View (Page 100, 101)

6-1. Chassis

6-2. Picture Tube

TRINITRON® COLOR TELEVISION

**SONY®**

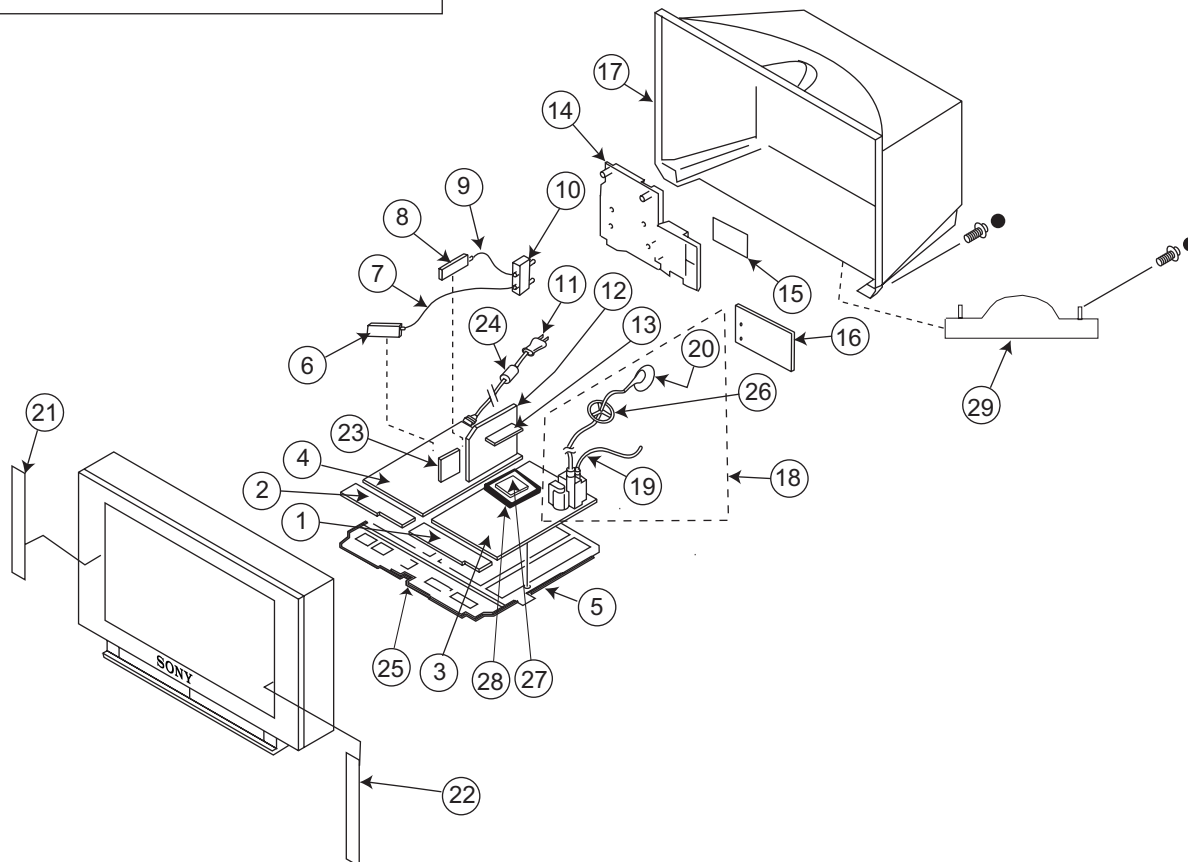


**NOTE:** The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 6-1. CHASSIS

● 7-685-663-79 SCREW + BVTP 4X16 TYPE 2 IT-3



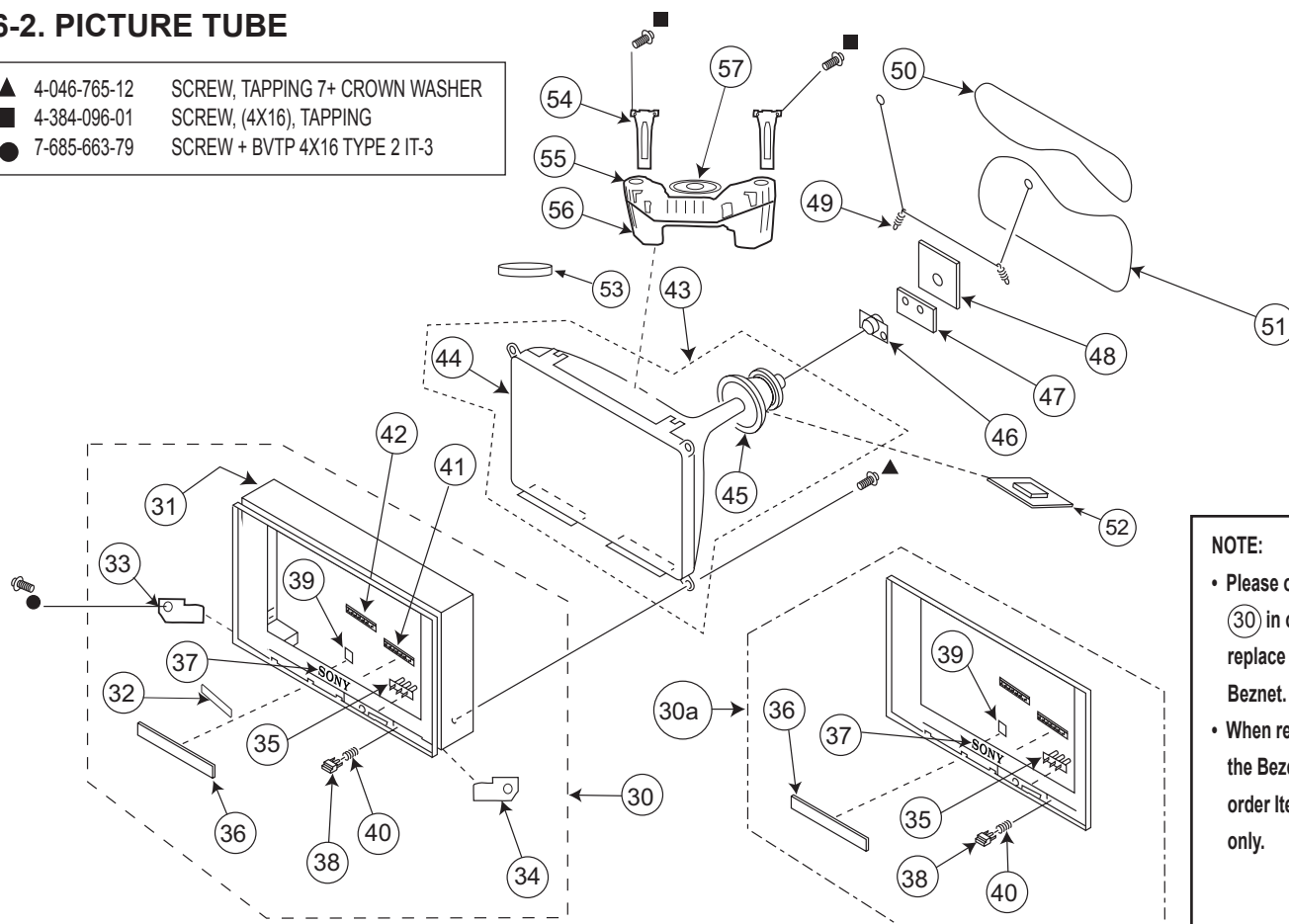
REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION
* 1	A-1377-021-A	HA MOUNTED PC BOARD		15	4-077-820-01	LABEL, TERMINAL
* 2	A-1372-904-A	HB (COM) MOUNTED PC BOARD		* 16	A-1373-817-A	U (COM) MOUNTED PC BOARD
* 3	A-1348-122-A	D COMPLETE PC BOARD		17	4-083-306-01	COVER, REAR
	The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (See 19-20).			⚠ 18	1-453-350-21	FBT ASSY NX-6000//J1C4 [19-20]
* 4	A-1299-560-A	A COMPLETE PC BOARD		⚠ 18	1-453-390-11	FBT ASSY NX-6000//M3G4 [HAWAII ONLY] [19-20]
* 5	4-075-828-01	BRACKET, MAIN		⚠ 19	1-900-805-19	FOCUS LEAD
6	8-598-501-30	TUNER, FSS BTF-FA402		⚠ 20	1-251-715-32	HV CAP ASSY
* 7	1-555-400-00	CABLE, PIN		⚠ 20	1-417-242-41	HV CAP ASSY [HAWAII ONLY]
8	8-598-542-20	TUNER, FSS BTF-WA412		21	1-544-953-11	SPEAKER (LEFT)
* 9	1-557-009-31	CABLE, P-P		22	1-544-953-21	SPEAKER (RIGHT)
⚠ 10	1-771-787-11	SWITCH, RF ANTENNA		* 23	A-1391-048-A	S MOUNTED PC BOARD
⚠ 11	1-790-316-21	CORD, AC POWER(WITH CONNECTOR)		24	1-500-386-11	FILTER, CLAMP (FERRITE CORE)
* 12	A-1136-200-A	B COMPLETE PC BOARD		* 25	4-083-314-01	BRACKET, H
* 13	A-1136-117-A	BC COMPLETE PC BOARD		26	4-084-918-01	RING, WISILL
* 14	4-075-829-01	BRACKET, U		* 27	A-1333-142-A	DH MOUNTED PC BOARD
	The label associated with the U Bracket is not included and must be ordered separately (See 15).			* 28	4-084-013-01	BRACKET, DH
				29	4-083-308-01	FOOT, RC

**NOTE:** The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 6-2. PICTURE TUBE

- ▲ 4-046-765-12 SCREW, TAPPING 7+ CROWN WASHER
- 4-384-096-01 SCREW, (4X16), TAPPING
- 7-685-663-79 SCREW + BVTP 4X16 TYPE 2 IT-3



**NOTE:**

- Please order Item (30) in order to replace the entire Beznets.
- When replacing only the Bezel, please order Item (30a) only.

REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION
30	X-4039-427-1	BEZNET ASSY	[31-40]	⚠ 44	8-735-095-05	CRT 42RSN
30a	X-4039-428-1	BEZEL ASSY	[35-40]	⚠ 44	8-735-106-05	CRT 42RSN (A101LWJ001) [HAWAII ONLY]
31	4-083-297-01	CABINET		⚠ 45	8-451-525-11	DY Y42RSC-M
32	4-083-484-01	LABEL, DOOR		⚠ 46	8-453-009-21	NA325-M2 (NECK ASSEMBLY)
* 33	4-083-304-01	FOOT, CABINET (L)		* 47	A-1372-833-A	W MOUNTED PC BOARD
* 34	4-083-305-01	FOOT, CABINET (R)				
35	4-083-299-01	GUIDE, LED		* 48	A-1332-075-A	C MOUNTED PC BOARD
36	4-083-298-11	DOOR		49	4-082-641-01	SPRING, 45MM
37	3-704-179-31	EMBLEM (NO.9), SONY		⚠ 50	1-424-865-11	COIL, DEGAUSSING [TOP]
38	4-083-300-01	BUTTON, POWER		⚠ 51	1-424-865-21	COIL, DEGAUSSING [BOTTOM]
* 39	4-084-857-01	CUSHION, DOOR		52	1-424-866-11	COIL, LANDING CORRECTION
40	4-083-303-01	SPRING, METAL		53	4-084-246-01	CUSHION, 20MM X 80MM
41	4-083-301-01	BUTTON, MULTI		54	X-4039-429-1	HOLDER ASSY, SPEAKER
42	4-083-302-01	BUTTON, MENU		* 55	4-083-309-01	BOX, SPEAKER (TOP)
⚠ 43	8-734-048-06	ITC 42RSN-C1	[44-45]	* 56	4-083-310-01	BOX, SPEAKER (BOTTOM)
⚠ 43	8-734-063-06	ITC 42RSN-C1M [HAWAII ONLY]	[44-45]	57	1-544-952-11	SPEAKER

# SERVICE MANUAL

# DX-1A CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KV-40XBR700</b>	RM-Y184	US	SCC-S47G-A
<b>KV-40XBR700</b>	RM-Y184	CND	SCC-S48E-A
<b>KV-40XBR700H</b>	RM-Y184	HAWAII	SCC-S54D-A

## SUPPLEMENT - 2

SUBJECT: ADDED CABLE ROUTINGS FOR REFERENCE

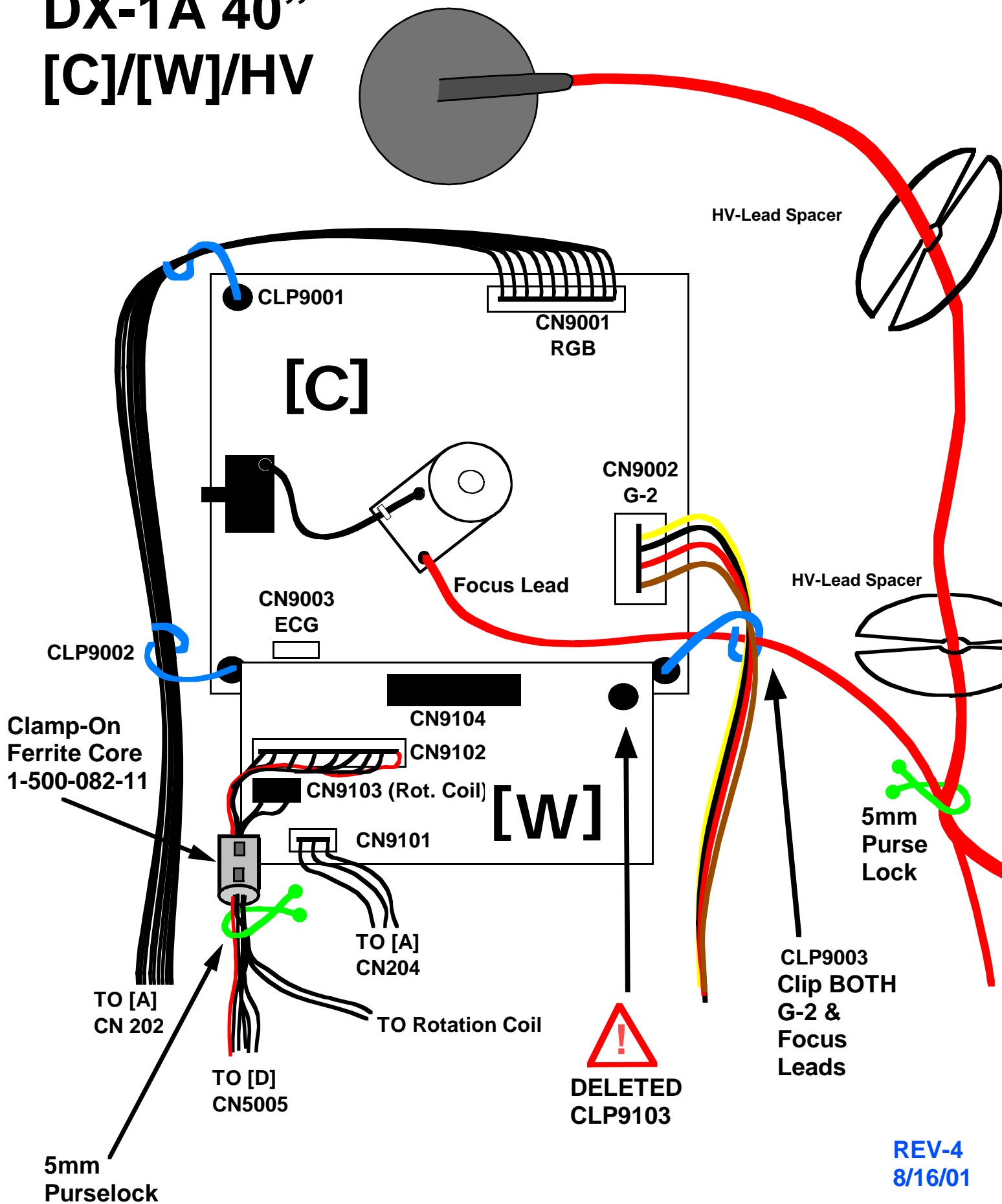
Correct the service manual as shown.  
File this Correction with the service manual.

TRINITRON® COLOR TELEVISION

**SONY®**

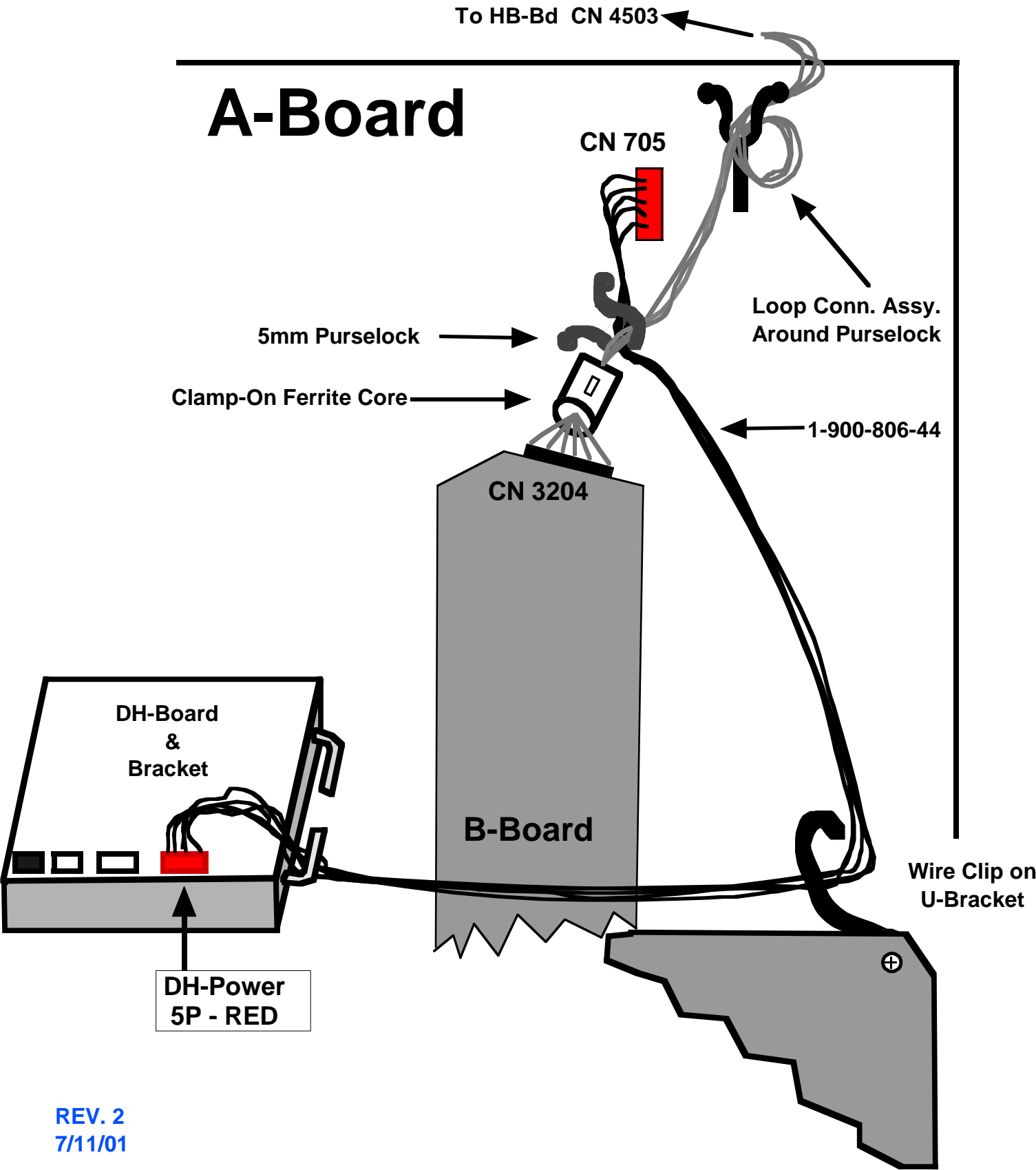
# DX-1A 40"

## [C]/[W]/HV



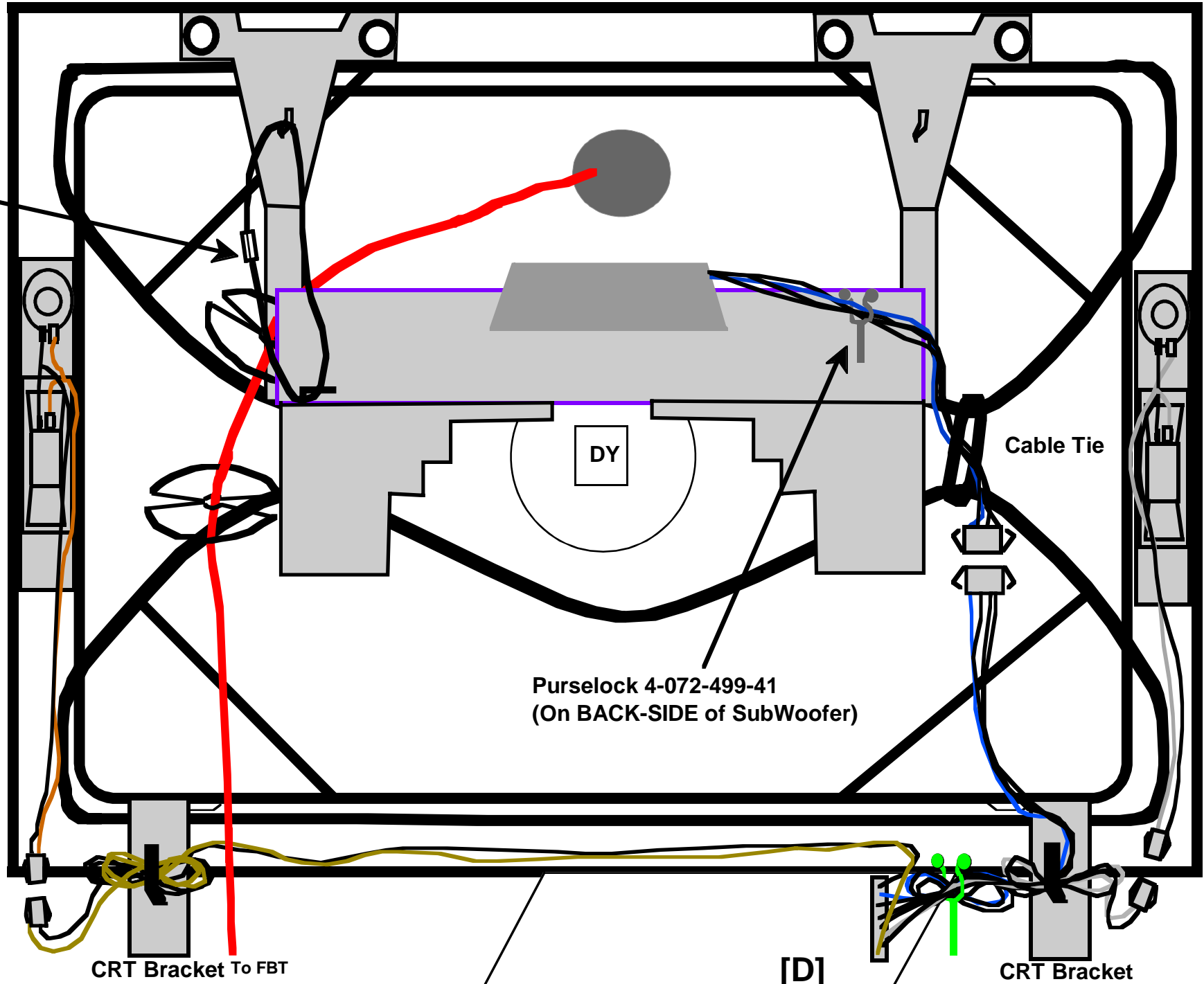
REV-4  
8/16/01

# DX-1A 40" DH-Power Dressing



# DX-1A 40" Spkr. Assy. Wire Dressing

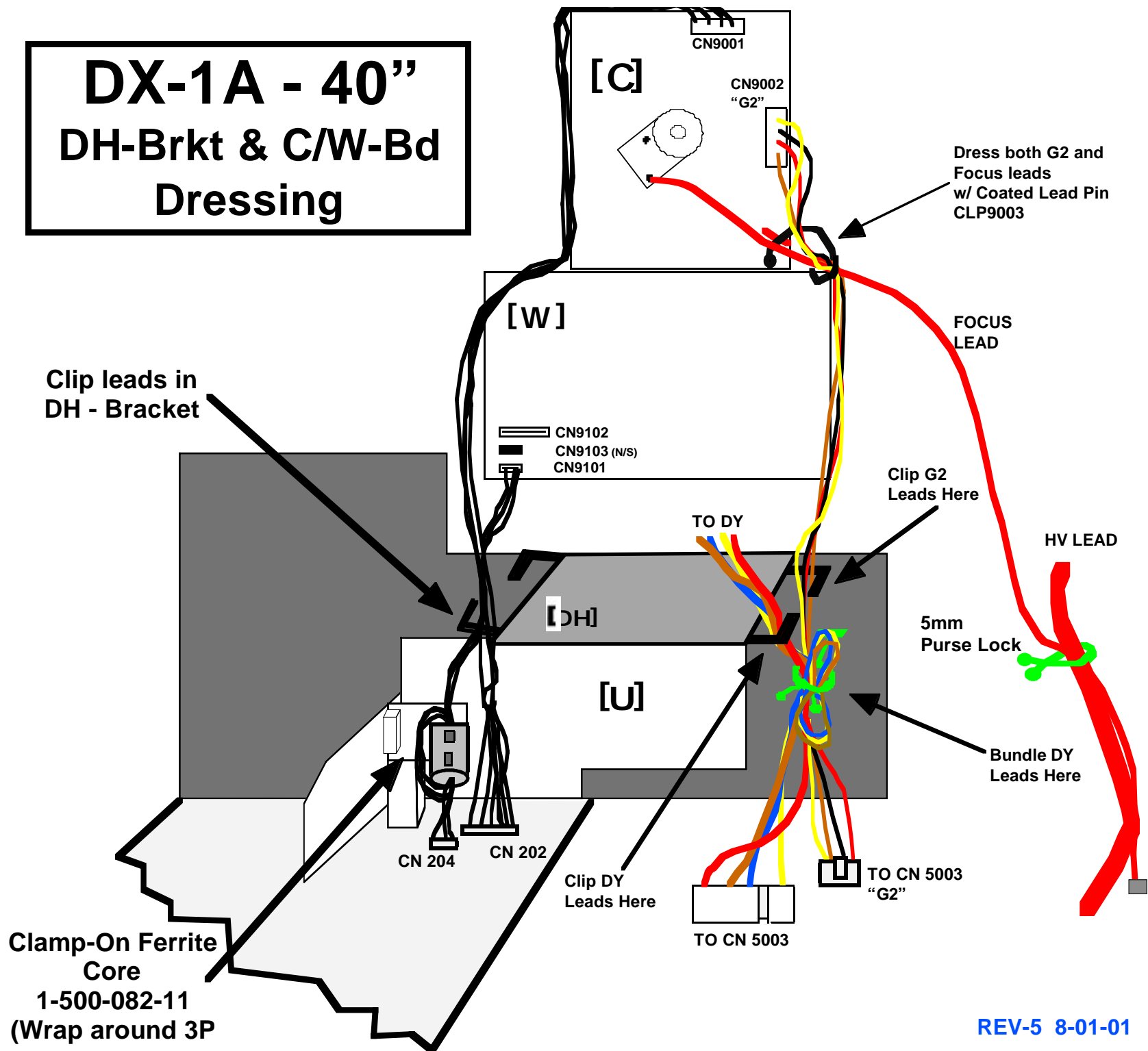
P-RN1-40XBR  
TEMPORARY  
Wire to hold  
Subwfr. in level  
postion.



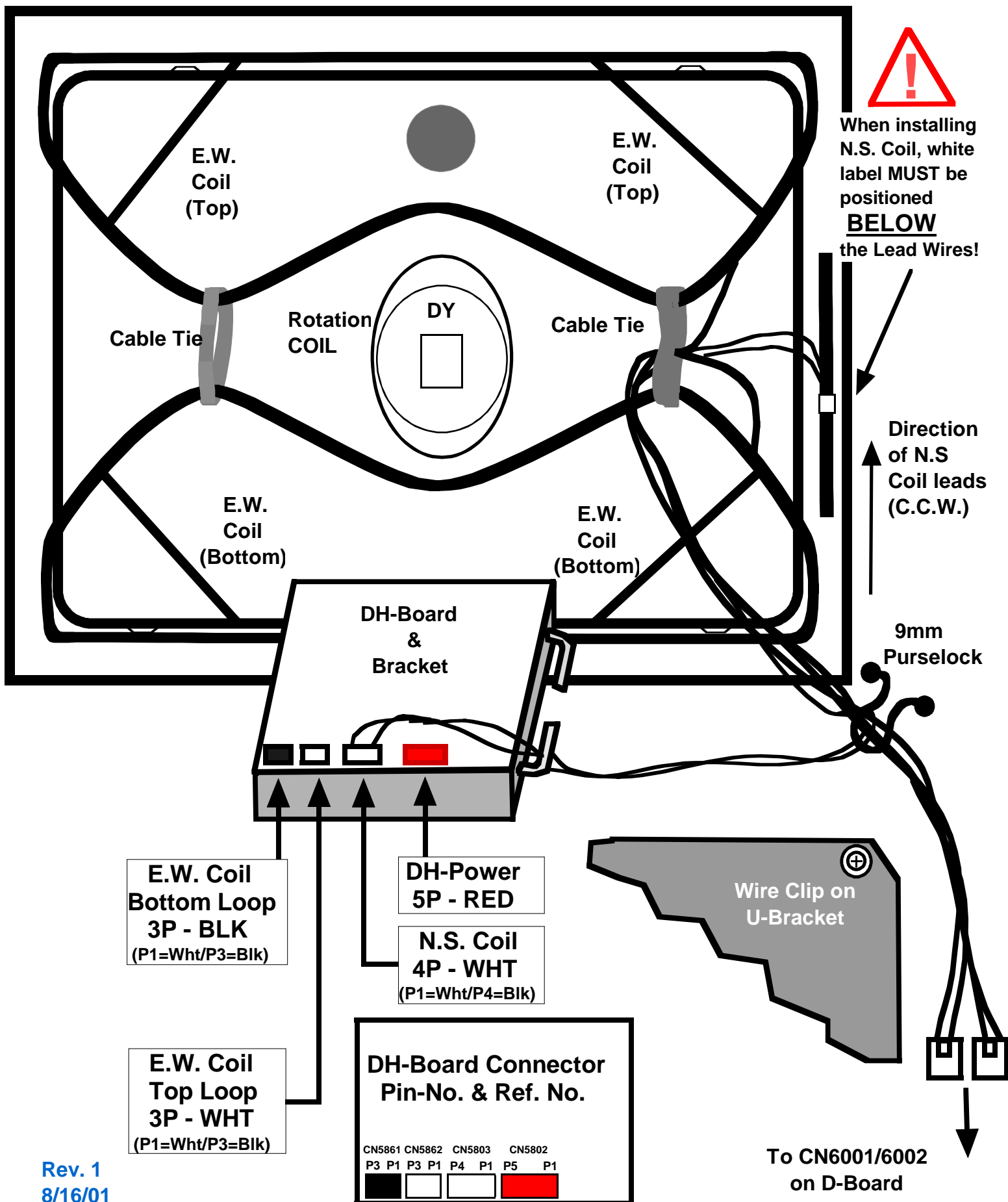


# DX-1A - 40"

## DH-Brkt & C/W-Bd Dressing



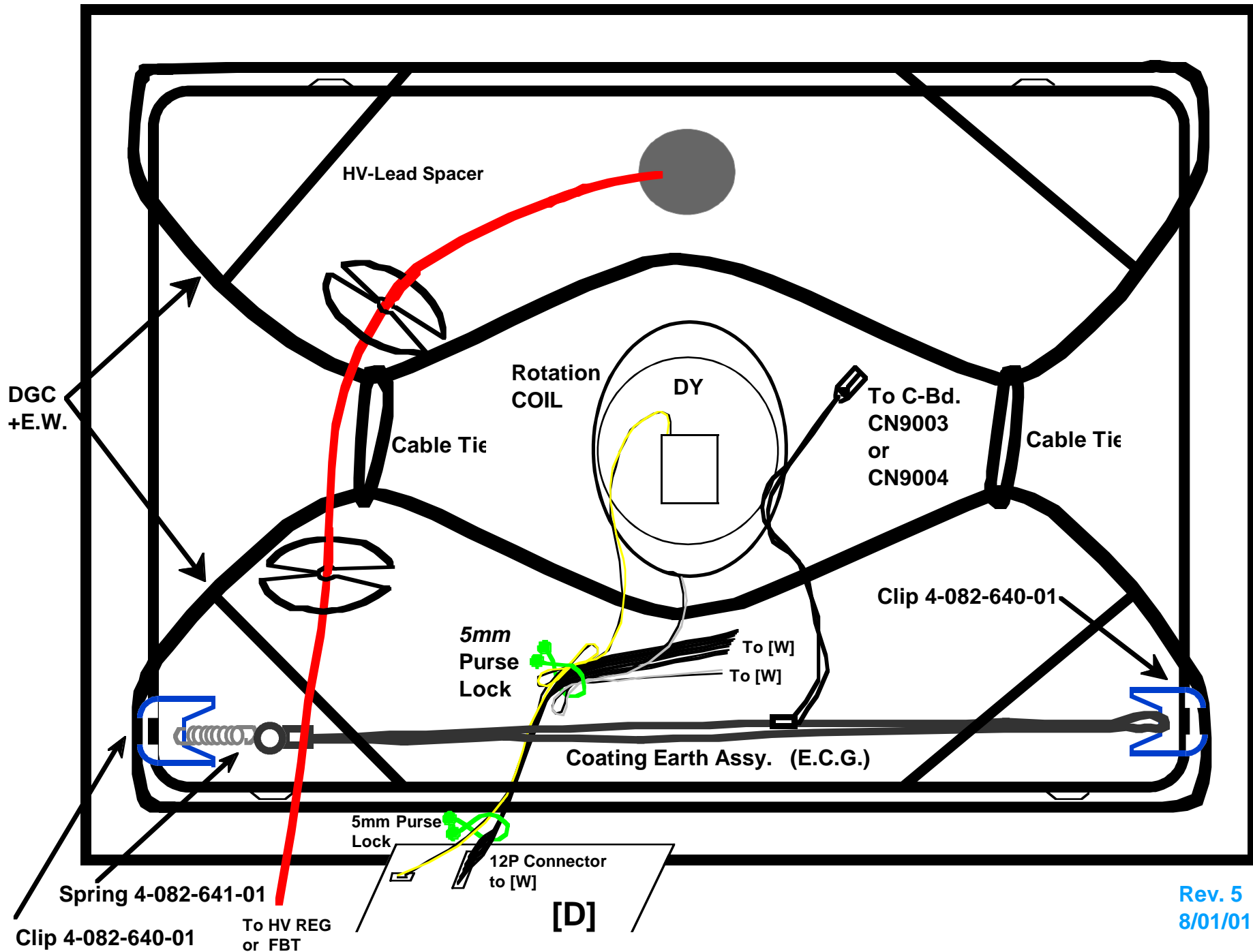
# DX-1A 40" DGC/N.S. Dressing



**(Shown w/o DH Bracket)**



# DX-1A 40" CRT Wire Dressing



# DX-1A 40" DGC/E.W. Dressing

